LINCOLN PULP AND PAPER CO., INC.) DEPARTMENTAL
PENOBSCOT COUNTY) FINDING OF FACT AND ORDER
LINCOLN, MAINE) PART 70 AIR EMISSION LICENSE
A-177-70-A-I)

After review of the air emissions license application, staff investigation reports and other documents in the applicant's file in the Bureau of Air Quality, pursuant to 38 M.R.S.A., Section 344 and Section 590, the Department finds the following facts:

I. REGISTRATION

A. Introduction

Lincoln Pulp and Paper Company, Inc. (LPP) of Lincoln, Maine has applied for an initial Part 70 Title V Air Emission License permitting the operation of emission sources associated with their pulp and paper manufacturing facility.

FACILITY	Lincoln Pulp and Paper Co., Inc. (LPP)
LICENSE NUMBER	A-177-70-A-I
LICENSE TYPE	Initial Part 70 License
SIC CODES	2611, 2621
NATURE OF BUSINESS	Pulp & Paper Mill
FACILITY LOCATION	Lincoln, Maine
DATE OF LICENSE ISSUANCE	October 22, 2002
LICENSE EXPIRATION DATE	October 22, 2007

B. Emission Equipment

The following emission units are addressed by this Part 70 License:

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
1. Recovery Boiler #2	1.9 MMlb BLS/day Supports 650 ADTPD * (≈ oil heat input of 500 MMBtu/hr)	Fuel Burning #6 oil, ≤2.0%, black liquor
2. Power Boiler #3	66.3 MMBtu/hr	Fuel Burning #6 oil, ≤2.0%, on and off-specification waste oil
3. Power Boiler #6	127 MMBtu/hr	Fuel Burning #6 oil, ≤2.0%, on and off-specification waste oil

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
4. Power Boiler #7	100.1 MMBtu/hr	Fuel Burning #6 oil, ≤2.0%, on and off-specification waste oil
5. Power Boiler #8	433 MMBtu/hr	Fuel Burning #2 oil, biomass, coal, TDF, demo wood, bark and wood waste, on and off specification waste oil, solid oily waste, sludge, liquor soap residue, waste paper, TRS and NCG gasses
6. M&D Digester System Kamyr Digester System	650 ADTPD *	Process Equipment
7. Brown Stock Washer System	650 ADTPD washed brown stock *	Process Equipment
8. Bleach/ClO_2 system	Supports 650 ADTPD *	Process Equipment
9. Lime Kiln	47.8 MMBtu/hr Supports 650 ADTPD *	Fuel Burning #6 oil, (≤2.0%), on and off-specification waste oil TRS/NCGs
10. Lime Slaker	190 TPD lime (CaO) * Supports 650 ADTPD	Process Equipment (Hydrates Lime ($Ca(OH)_2$))
11. Causticizers	Supports 650 ADTPD *	Process Equipment (Produces White Liquor)
12. Lime Silo	Storage for lime (CaO)	Process Equipment (Lime storage)
13. Multiple Effect Evaporator System	Supports 650 ADTPD	Process Equipment (Produces Strong Black Liquor Solids)
14. Smelt Tank	Supports Recovery Boiler firing rate of 1.9 MMlb of dry BLS/day *	Process Equipment (Produces Green Liquor)
15. Waste Treatment Plant (WTP)	_ _ _	Process Equipment (Primary and Secondary Activated Sludge Treatment)
16. WTP Emergency Power Generator (diesel)	11.94 MMBtu/hr (1.3 Megawatt)	Emergency Power to WTP

EMISSION UNIT ID	UNIT CAPACITY	UNIT TYPE
17. Parts Washers	N/A	Process Equipment
18. Pulp Dryer	N/A	Process Equipment
19. No. 4 Paper Machine	N/A	Process Equipment
20. No. 5 Paper Machine	N/A	Process Equipment
21. No. 6 Tissue Machine	N/A	Process Equipment
22. No. 7 Tissue Machine	N/A	Process Equipment
23. Diesel Fire Pump	0.8 MMBTU/hr (120 hp)	diesel fuel, ≤ 0.5%

NCGs – Non-Condensable Gases
TRS - Total Reduced Sulfur
TDF – Tire Derived Fuel
BLS – Black Liquor Solids
ADTPD – Air Dried Tons of Pulp per Day

* - Unit capacities for process equipment and pollution control equipment are nominal and listed for informational purposes only and are not intended as license restrictions.

LPP has additional insignificant activities, which do not need to be listed in the emission equipment table above. The list of insignificant activities can be found in the Part 70 license application and in Appendix B of Chapter 140 of the Department's Regulations.

C. Application Classification

The application for LPP does not include the licensing of increased emissions or the installation of new or modified equipment, therefore the license is considered to be an Initial Part 70 License issued under Chapter 140 of the Department's regulations for a Part 70 source.

D. General Facility Requirements

LPP is subject to the following state and federal regulations listed below, in addition to the regulations listed for specific units as described further in this license.

CITATION	REQUIREMENT SUMMARY
Chapter 101	Visible Emissions
Chapter 102	Open Burning
Chapter 103	Fuel Burning Equipment Particulate Emission Standard
Chapter 105	General Process Source Particulate Emission Standard

Applicable State and Federal regulations continued…

CITATION	REQUIREMENT SUMMARY
Chapter 106	Low Sulfur Fuel
Chapter 109	Emergency Episode Regulation
Chapter 110	Ambient Air Quality Standard
Chapter 116	Prohibited Dispersion Techniques
Chapter 117	Source Surveillance
Chapter 118	Gasoline Dispensing Stations Vapor Control
Chapter 122	Chlorine and Chlorine Dioxide Emission Standards
Chapter 124	Total Reduced Sulfur Control from Kraft Mills
Chapter 130	Solvent Degreasers
Chapter 134	VOC RACT
Chapter 137	Emission Statements
Chapter 138	NO_X RACT
Chapter 140	Part 70 Air Emission License Regulations
Chapter 143	New Source Performance Standards
Chapter 144	National Emission Standards for Hazardous Air Pollutants
40 CFR Part 60, Subparts A, BB and Db	Performance Standards for Steam Generating Units and Performance Standards for Kraft Mills
40 CFR Part 63 Subpart A, S and MM	NESHAP from the Pulp and Paper Industry

II. BEST PRACTICAL TREATMENT (BPT)

A. Introduction

In order to receive a license the applicant must control emissions from each unit to a level considered by the Department to represent Best Practical Treatment (BPT), as defined in Chapter 100 of the Air Regulations. Separate control requirement categories exist for new and existing equipment as well as for those sources located in designated non-attainment areas.

BPT for existing emissions equipment means that method which controls or reduces emissions to the lowest possible level considering:

- the existing state of technology;
- the effectiveness of available alternatives for reducing emission from the source being considered; and
- the economic feasibility for the type of establishment involved.

Process Description

LPP is an integrated kraft pulp and paper mill. Currently, LPP operates a hardwood digester and a softwood sawdust digester to produce pulp with approximately 50% recycled content. LPP uses one recovery boiler and a lime kiln in the recaust process for reclamation of the pulping chemicals. Also, LPP has three oil-fired boilers and one multi-fuel boiler to supply the mill with steam. The two paper machines produce specialty paper and the two tissue machines produce multi-ply dyed tissue. The pulp dryer machine produces bailed pulp which is either used by LPP, Eastern Fine Paper in Brewer, Maine or sold to other paper manufacturers.

Pulp from the digesters, called brown stock, is washed in the brown stock washer systems to remove residual spent cooking liquor from the pulp. After the pulp is washed in the brown stock washers, the pulp is bleached to a desired brightness and then sent to the paper/tissue production area. In the paper/tissue production area the bleached pulp is then used in the paper or tissue machines to make paper or tissue or is dried as bleached pulp.

The spent cooking liquor exiting the digesters, called black liquor, contains dissolved and suspended inorganic and organic compounds. The black liquor is then sent into the multiple effect evaporation system to evaporate the water and bring the solids in the liquor to a higher concentration. Upon exiting the multiple effect evaporation system, the concentrated black liquor, with a black liquor solids (BLS) content of 70% or more, is burned in the recovery boiler for chemical recovery and the production of steam.

Pulping chemicals recovered after combustion of black liquor in the recovery boilers, primarily sodium and sulfur compounds, are collected in the bottom of the recovery boiler as molten “smelt”. The smelt flows out of the bottom of the recovery boiler to a smelt dissolving tank, where the hot smelt mixes with weak wash to form green liquor.

Green liquor from the smelt tank flows to the causticizing/lime kiln area, where chemicals reclaimed in the recovery boiler and smelt tank are further processed into the white liquor used in the digester system to cook the wood. Lime (CaO) is used in the causticizing process to convert the recovered but inactive sodium compounds into active compounds. The purpose of the lime kiln is to recover and recycle the lime. Hydrated lime from the lime slaker reacts with the green liquor, and calcium carbonate ($CaCO_3$) is precipitated out as lime mud.

The lime mud is then washed, filtered, and sent to the lime kiln where the (carbon dioxide (CO_2) is driven off) and the recovered lime (CaO) is recycled back into

the process. Lime mud enters the upper end of the kiln and is passed through successive stages of water evaporation, mud preheating, and lime calcination. Lime produced in the lime kiln is sent to the hot lime silo which feeds the slaker along with any fresh lime makeup. In the slaker, the lime is mixed with water to convert the lime into hydrated lime ($Ca(OH)_2$). The hydrated lime produced in the lime slaker discharges into the causticizing system. The causticizing system converts the green liquor into white liquor, which is then recycled back to the digester system, as described above.

B. PSD/BACT Review

In 1991, the Department issued Air License A-177-71-A-R to LPP. This license was issued to permit construction of the No. 8 power boiler and to permit a millwide production increase to 650 tons/day. The license was issued pursuant to federal PSD requirements and the Department's air licensing requirements for major modifications.

Lincoln Pulp and Paper has adjusted/changed/modified pulp and paper processes, including some activities that increased production through efficiency upgrades. These past activities and/or similar future activities at the mill are permitted under the current Air Emission License A-177-71-A-R and will be allowed for under this Title V license. The Department wrote the current air license to ensure the mill could undertake a broad range of future activities to achieve the permitted increased production levels without requiring extensive permitting applicability analyses and discussions of those activities. For example, this is why the air license addresses Best Available Control Technology (BACT) for the: digesters, brown stock washers, multiple effect evaporators, bleach plant, recovery boiler #2, smelt tank, lime kiln, slaker, causticizer, tissue dryer and mill fugitive particulates. This approach will be incorporated and carried over in this initial Title V air license, which satisfies standard statement (1) and standard condition (2) of this license.

Furthermore, an air impact modeling analysis, based on maximum source-specific allowable emissions and worst-case operating scenarios, resulted in compliance with State and Federal Ambient Air Quality Standards (MAAQS) and increments. The 1991 air license, with the BACT and air modeling, allows for LPP to undertake physical or operational changes to its existing equipment to achieve the permitted production levels provided these activities do not result in the release of any pollutants beyond federally enforceable emission limits, production limits, or state air license limits.

C. Power Boilers #3, #6, and #7

- Power Boiler #3, licensed at 66.3 MMBtu/hr heat input
- Power Boiler #6, license at 127 MMBtu/hr heat input
- Power Boiler #7, licensed at 100.1 MMBtu/hr heat input

The three existing power boilers will not be modified, changed, or have their steam production rates increased from current licensed allowed levels. LPP's Boiler #1 is no longer in operation and will not be included in this Title V air emission license.

Power Boiler #3 was manufactured by Babcock and Wilcox in 1945. The installation of Power Boiler #3 was prior to the New Source Performance Standards (NSPS) applicability date for Subpart D and Db. Boiler #3 is operated as a standby unit (less than 4320 hours per year) per NOx RACT amendment #6 (A-177-71-G-A). Power Boiler #6 was manufactured by Erie City in 1976. The size of the boiler is less than New Source Performance Standards (NSPS) applicability for 40 CFR Part 60 Subpart D and prior to the applicable dates for Subpart Db. Power Boiler #7 was manufactured by Babcock and Wilcox in 1945, prior to the applicable dates for Subparts D and Db. It is important to note that Power Boilers #3, #6, and #7 all vent through a common stack and have a single opacity monitor. Power boilers #3, #6 and #7 are licensed to burn #6 fuel oil with sulfur content ≤ 2.0% and on and off-specification waste oil per amendment #18 (A-177-71-U-M).

Streamlining

Opacity

LPP accepts streamlining for opacity requirements. Chapter 101, Section 2(A)(2) of the Department's regulations and Best Practical Treatment (BPT) requirements are applicable. The Best Practical Treatment (BPT) opacity limit is more stringent. Therefore, only the more stringent BPT opacity limit is included in this license.

Particulate Matter

LPP accepts streamlining for particulate matter requirements. Chapter 103 of the Department's regulations and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

Sulfur Dioxide

LPP accepts streamlining for sulfur dioxide requirements. Chapter 106 and BPT limits are applicable. The BPT sulfur dioxide limit is more stringent. Therefore, only BPT requirements are included in this license.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping that includes records of fuel use through purchase receipts indicating amounts (gallons) and percent sulfur by weight.

Continuous emission monitoring includes operation of a continuous monitor for opacity in accordance with the requirements in Chapter 117 of the Department's Regulations.

D. Recovery Boiler #2

Recovery Boiler #2 was manufactured by Babcock and Wilcox in 1972. The unit is licensed to limit heat input capacity to 1.9 million pounds (MMlbs) of dry black liquor solids (BLS) per day or 500 MMBtu/hr of #6 fuel oil. The Recovery Boiler is used to recover chemicals and produce steam. Emissions exit through two identical 175 foot stacks. The recovery boiler is a straight fire unit burning black liquor, typically without combustion support from fossil fuel. Typically, oil is used only during start-ups, shutdowns and to stabilize operation of the boiler.

Recovery Boiler #2 is not subject to NSPS 40 CFR Part 60, Subpart BB for Kraft Recovery Boilers manufactured after September 24, 1976 or Subpart Db for Steam Generating Units constructed after June 19, 1984. Also, Recovery Boiler #2 is not subject to Subpart D for fossil fuel fired steam generators because its annual capacity factor for fossil-fuel is less than 10%. Recovery Boiler #2 is subject to 40 CFR Part 63, Subpart MM, Standards for Hazardous Air Pollutants from Chemical Recovery Combustion Sources at Kraft Pulp Mills. This unit was subject to a full BACT analysis as part of the 1991 PSD/NSR licensing of the mill. The unit is meeting the BACT limits. Furthermore, although not subject to NSPS and not yet subject to Subpart MM, the unit's emissions are below Subpart MM and NSPS standards for particulate and boiler outlet TRS emissions.

The Recovery Boiler is exhausted to a wet bottom electrostatic precipitator (ESP) to control particulate emissions. This unit also serves to re-introduce salt cake into the black liquor which further concentrates the solids content.

Regulated pollutants emitted from the recovery boiler are PM, PM_{10}, SO_2, NOx, CO, VOC, and TRS. The recovery boiler's emissions vent through two separate stacks, therefore, compliance is based on the average emissions from the two

stacks. A BACT analysis was conducted for each pollutant from the recovery boiler, and is considered BPT per this Title V air emission license.

PM and PM_{10}

LPP shall control PM and PM10 emissions from the recovery boiler by using an ESP to achieve the BACT emission level of 0.044 grains per dry standard cubic foot (0.044 gr/dscf) corrected to 8% oxygen.

LPP shall meet the applicable requirements of 40 CFR Part 63, Subpart MM, including the source specific emission limits or the alternative facility (or bubble) limit provisions, by March 14, 2004.

LPP shall stack test the recovery boiler every two years for PM in accordance with 40 CFR Part 60, Appendix A, Method 5. The last compliance PM stack test was done October 2, 2001. Therefore, the next stack test for PM shall be conducted in the calendar year 2003.

SO_2 Emissions

SO_2 emissions from the recovery boiler shall be controlled to 141 ppmv (dry basis) @ 8% O_2 on a 24-hour block average basis when firing only black liquor or when firing a combination of black liquor and oil. The recovery boiler fires #6 fuel oil. Oil fired in the recovery boiler alone shall not exceed 0.7% sulfur by weight or 2.0% sulfur by weight when firing a combination of black liquor and oil. The recovery boiler is fired with fuel oil for startup purposes (in order to initiate BLS firing) in addition to shutdowns and other events which require the addition of oil firing.

Based on the design of the boiler and information provided to the Department, the unit will not exceed the SO_2 emission limits as long as fuel oil use is restricted as described above. Therefore, periodic monitoring shall consist of records of fuel oil receipts demonstrating sulfur content and records of fuel oil use. During periods of time when the recovery boiler has to fire oil, the SO_2 emissions are increased. Through a modeling demonstration requested by the Department, it was determined that increased SO_2 emissions from the recovery boiler would still meet State and Federal Ambient Air Quality Standards and increments. When firing black liquor efficiently in the Recovery Boiler, SO_2 emissions have been demonstrated to be very low or undetectable.

NOx Emissions

NO_x RACT for the recovery boiler was determined to be the installation of a NO_x CEMS and compliance with limits of MEDEP Chapter 138 on a 24-hour block average basis. As specified in MEDEP Chapter 138, Section 3(O), for any source

that employs the use of a continuous emissions monitoring system, periods of startup, shutdown, equipment malfunction and fuel switching shall not be included in determining 24-hour daily block arithmetic average emission rates provided that operating records are available to demonstrate that the facility was being operated to minimize emissions.

Emissions of Total Reduced Sulfur (TRS) from the recovery boiler are to be controlled in accordance with MEDEP Chapter 124.

Streamlining

Opacity

LPP accepts streamlining for opacity requirements. Chapter 101, Section 2(B)(2) of the Department's regulations PSD BACT limits and Best Practical Treatment (BPT) requirements are applicable. The BPT opacity limit in this license is more stringent than the limit in Chapter 101 and the PSD BACT limits in LPP's 1991 PSD/NSR air license. Therefore, only the more stringent BPT opacity limit is included in this Title V license, however, LPP may apply for minor revision to this license to replace the BPT limit with the applicable limits in Chapter 101 and the 1991 PSD/NSR air license and such a change shall not be considered a modification of the recovery boiler.

Sulfur Dioxide

LPP accepts streamlining for sulfur dioxide requirements. Chapter 106, PSD BACT limits in LPP's 1991 PSD license and BPT limits are applicable. The BPT sulfur dioxide limit is the same as the PSD BACT limit and more stringent than the Chapter 106 limit. Therefore, only BPT/BACT requirements are included in this license.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes fuel use records and fuel analysis records. LPP shall operate monitors and record the following additional parameters as specified for the recovery boiler:

Parameter for recovery boiler	Recording Frequency	Demonstrated With
Black liquor firing rate	once every 24 hours	flowmeter
Black liquor solids	once every 24 hours	refractometer
Operating ESP T.R. set voltage and amp	once per shift	amp meter

LPP has submitted sufficient information to the Department demonstrating that SO_2 emissions from the recovery boiler are at a fraction of applicable limits when oil is not burned. When firing black liquor efficiently in the Recovery Boiler, SO_2 emissions have been demonstrated to be very low or undetectable. To assure efficient liquor firing in the Recovery Boiler, LPP will continuously monitor black liquor solids and record once per shift on the operator log. LPP will not fire liquor with solids content below 58% to assure efficient combustion. When oil is fired in the unit, fuel records and sulfur content fuel receipts are required to be maintained to show compliance with SO_2 emissions and a fuel cap is also included in the license.

Continuous emission monitoring also includes operation of continuous monitors for opacity, TRS and NOx in accordance with requirements in Chapter 117 of the Department's Regulations.

E. Power Boiler #8

Power Boiler #8 was manufactured by McBurney in 1991 with a maximum design heat input capacity of 433 MMBtu/hr combusting wood chips. The primary fuel is composite fuel/biomass and the secondary fuel is #2 fuel oil with a sulfur content not to exceed 0.5% by weight, and coal. Additional licensed fuels include wood chips, wood room waste, sawdust, sawmill waste, bark pile reclaim (a mixture of bark, sawdust, and waste treatment plant sludge which has accumulated over years and is various stages of deterioration), coal, fuel oil, waste treatment plant sludge and waste paper from LPP and Eastern Fine Paper, construction and demolition debris, liquor soap (a wood derived product, aka. tall oil) and tire chips. Also, specification and off-specification waste oil may be burned if the sulfur content is less than 0.5% by weight and the fuel meets specification waste oil standards (as specified by the DEP) and a record of the quantity and type of specification waste oil burned is maintained.

In addition, solid oily waste may be burned per amendment #18 (A-177-71-U-M) provided that the following testing be performed:

- LPP shall collect representative solid oily waste samples. The sample of solid oily waste shall be analyzed for TCLP metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag), (any TCLP hazardous waste shall not be burned), PCBs, Total Organic Halogens (TOX), (High) heat value (PCB and TOX levels shall meet DEP off-specification requirements), ash content, moisture content and sulfur.
- A record of the tons combusted along with the analytical data shall be maintained.
- The testing of a representative grab sample shall be annually.

Power Boiler #8 is used for destruction of TRS/NCG gases when the lime kiln is not used for such purposes.

Construction of Power Boiler #8 commenced in 1991 and, therefore, the unit is subject to, New Source Performance Standards (NSPS) Subparts A, and Db. Power Boiler #8 is not subject to Subpart D because it is subject to Subpart Db and construction commenced after June 19, 1986. In addition, Power Boiler #8 is not an electric utility steam generating unit and is therefore not subject to NSPS Subpart Da.

Power Boiler #8 is equipped with air pollution control equipment, including a mechanical dust collector and electrostatic precipitator. LPP operates CEMs for NO_x, O_2, and Opacity on the exhaust of Power Boiler #8. Emissions exit through a 237 foot stack.

Streamlining

Opacity

LPP accepts streamlining for opacity requirements. Chapter 101, Section 2(A)(1) of the Department's regulations, PSD BACT limits in LPP's 1991 PSD air license and BPT requirements are applicable. The BPT opacity limit is more stringent than the Chapter 101 and BACT limits. Therefore, only the more stringent BPT opacity limit is included in this license.

Particulate Matter

LPP accepts streamlining for particulate matter requirements. Chapter 103 of the Department's regulations, PSD BACT limits in LPP's 1991 PSD air license and BPT requirements are applicable. The BPT particulate matter limit is the same as the PSD BACT limit, which is more stringent than Chapter 103. Therefore, only the more stringent BPT/BACT particulate matter limit is included in this license.

Sulfur Dioxide

LPP accepts streamlining for sulfur dioxide requirements. Chapter 106 of the Department's regulations and NSPS and BACT limits in LPP's 1991 PSD/NSR air license are applicable. The BACT limit of 0.5% sulfur fuel oil is more stringent than NSPS or Chapter 106. Therefore, only the more stringent sulfur limit is included in this license.

Nitrogen Oxides

LPP accepts streamlining for nitrogen oxide requirements. Chapter 138 of the Department's regulations, NSPS, BPT and PSD BACT limits in LPP's 1991 PSD air license requirements are applicable. The BPT and BACT limits are the same. The Chapter 138 and BPT/BACT limits are more stringent than NSPS limits.

Therefore, only the more stringent Chapter 138 and BPT/BACT nitrogen oxides limits are included in this license.

Periodic Monitoring

Periodic monitoring shall consist of fuel oil supplier receipts showing sulfur content of the oil, and recordkeeping which includes fuel use records and fuel analysis records. LPP shall monitor and record the operating ESP T.R. set voltage and amperage once per shift.

Parameter	Recording Frequency	Demonstrated With
Feed water rate	once every 24 hours	flowmeter
Fuel oil firing rate	once every 24 hours	flowmeter
Operating ESP T.R. Set voltage and amp	once per shift	amp meter

Continuous emission monitoring also includes the instrument monitoring and recordkeeping requirements in Chapter 117 of the Department's Regulations.

F. M&D and Kamyr Digester Systems

The M&D Digester System was manufactured by Bauer in 1976, the Kamyr Digester System was manufactured by Kamyr Inc. in 1958. The M&D and Kamyr Digesters are currently licensed up to 650 tons of finished material per day. Wood sawdust and wood chips are the raw material that enter the digester systems and brown stock pulp is the finished material. The Digester Systems are equipped with part of the LVHC system which controls TRS, VOCs and HAPs.

The digesters were constructed prior to September 24, 1976 and are therefore not subject to NSPS 40 CFR Part 60 Subpart BB for Kraft Digesters.

The digesters vent to LPP's LVHC system for the purposes of MEDEP Chapter 124 and as such they are subject to 40 CFR Part 63, Subpart S per §63.443(a)(1)(i).

G. Brownstock Washer System

The Brown Stock Washer System (BSW) was manufactured by IMPCO in 1958. The BSW is currently licensed up to 650 air dried tons per day. Unwashed brown stock is the raw material that enters this brown stock washer system and washed brown stock is the finished material. The brown stock washer system washes the cooked pulp from the digester in order to remove the residual liquor that would

contaminate the pulp during subsequent processing steps, and to recover the maximum amount of spent chemicals with minimum dilution.

The BSW system was installed prior to the applicability date for NSPS 40 CFR Part 60, Subpart BB for Kraft Mill Brown Stock Washers. The washer system is subject to 40 CFR Part 63, Subpart S, Standards for HAPs from the Pulp and Paper Industry as well as MEDEP Chapter 124, TRS Control.

H. Bleach Plant and Chlorine Dioxide Generation

The Bleach Plant and ClO_2 generating system was manufactured by IMPCO. The Bleach Plant is currently licensed to support up to 650 air dried tons of pulp per day. This system was initially manufactured in 1958. Unbleached pulp is the raw material that enters the Bleach Plant and ClO_2 generating system and bleached pulp is the finished material. In the chlorine dioxide process, sodium chlorate reacts with methanol in the presence of sulfuric acid to form chlorine dioxide and a spent acid stream containing formic acid and an acidic salt cake. The bleach plant utilizes chlorine dioxide as a bleaching agent.

In 1999, LPP proposed to use a new bleaching technology which was approved by the Department through air emission license amendment #17 (A-177-71-V-M). This process allowed a change from bleaching with chlorine to bleaching with oxygen. The new bleaching process is now $A_DO_oD_{NP}D$. The first stage is an activation stage to lower pH and to activate the pulp to increase the oxygen reaction sites. This is followed by two stages of oxygen bleaching. Next there is added retention time for neutralization and the ability to use peroxide between the two chlorine dioxide stages (this reduces the use of chlorine dioxide).

Emissions from the chlorine dioxide generation plant and some bleach plant vents are treated with a single bleach plant wet spray scrubber and are not subject to Chapter 101 because emissions are overwhelmingly water vapor.

The Bleach Plant and chlorine dioxide generation plant are subject to the requirements of MEDEP Chapter 122. The Bleach Plant, but not the chlorine dioxide generating plant, is subject to 40 CFR Part 63, Subpart S, Standards for HAPs from the Pulp and Paper Industry, requirements.

Periodic Monitoring
LPP shall operate monitors and record the following parameters as specified for the Bleach Plant Scrubber Systems:

Parameter for each scrubber	Recording Frequency	Demonstrated With
Recycle flow	once per shift	flowmeter
Scrubber influent pH	once per shift	probe
Fan amperage	once per shift	amp meter
Influent ORP	once per shift	probe
D1 uptube temperature	once per shift	thermocouple

EPA granted approval by letter dated September 3, 2001, for LPP's request to monitor fan amperage for the bleaching system gas scrubber vent gas fan in lieu of monitoring vent gas inlet flow rate. EPA granted approval by letter dated September 3, 2001, for LPP's request to monitor bleach plant scrubber influent pH and Oxidation/Reduction Potential (ORP) in lieu of monitoring pH and ORP at the bleach plant scrubber effluent. Pursuant to EPA's August 14, 2002 letter (see below) these parameters must be monitored for purposes of Subpart S only when D1 uptube temperature drops below 140F.

LPP has demonstrated that it can meet the emission outlet concentration limit of 10 parts per million or less by volume of total chlorinated HAP by process modifications alone as specified in 63.445 (b). LPP has demonstrated through stack tests demonstration that the process modifications have been effective in reducing uncontrolled emissions of chlorine to less than 10 ppm and therefore, operation of this scrubber is not necessary to achieve compliance with the MACT requirements.

EPA granted approval by letter dated August 14, 2002 for LPP's request to use monitor the D1 uptube temperature as an alternative parameter monitor in order to demonstrate with the process modification to achieve compliance with the bleaching system standard in 40 CFR Section 63.445. LPP will monitor D1 uptube temperature to demonstrate compliance with the applicable operating scenario. If the D1 uptube temperature is below 140F, then LPP must operate the belach plant scrubber and measure the scrubber parameters in accordance with 40 CFR 63.453(c) and EPA's September 3, 2001 letter to LPP.

As required by MEDEP Chapter 122, bleach plant monitoring must operate at least 90% of the time during each quarter. However, LPP is not required to monitor pressure drop because it is not a meaningful parameter since LPP has an atomizing spray design scrubber.

I. Lime Kiln

The lime kiln was manufactured by Allis-Chalmers in 1958. The lime kiln is currently licensed to support up to 650 air dried tons of pulp per day (approximately 190 tons per day of 100% CaO). The Lime Kiln is a rotary kiln unit fired with #6 fuel oil with a sulfur content not to exceed 2.0% by weight and off-specification waste oil. The lime kiln is equipped with a 48 MMBtu/hr burner. The Lime Kiln is used to recover lime (CaO) from lime mud (a product of the causticizing of green liquor). Lime is then reused in the regeneration of white liquor. The lime kiln is equipped with a wet scrubber to control the emissions of PM/PM_{10}, SO_2, TRS, VOC and NOx. The Lime Kiln is equipped to continuously monitor and record venturi scrubber pressure drop and media flowrate, O_2, and TRS. The lime kiln is used to control NCG's from the LVHC system when such gases are not combusted in No. 8 power boiler.

The lime kiln is subject to the requirements of NESHAP's for Chemical Recovery Sources at Pulp Mills, 40 CFR Part 63, Subpart MM.

Streamlining

Particulate Matter

LPP accepts streamlining for particulate matter requirements. Chapter 105 of the Department's regulations, BPT and PSD BACT limits in LPP's 1991 PSD license are applicable. The BPT and BACT limits are the same and are more stringent than Chapter 105. Therefore, only the more stringent BPT/BACT particulate matter limit is included in this license.

Sulfur Dioxide

LPP accepts streamlining for sulfur dioxide requirements. Chapter 106, BPT and PSD BACT limits in LPP's 1991 PSD air license limits are applicable. The BPT and BACT sulfur dioxide limit are the same and are more stringent than Chapter 106. Therefore, only BPT/BACT requirements are included in this license.

Periodic Monitoring

Periodic monitoring shall consist of recordkeeping which includes fuel use records and fuel analysis records. LPP shall operate and record the following monitors as specified for the lime kiln:

Parameter	Recording Frequency	Demonstrated With
Scrubber pressure drop	once per shift	differential pressure gauge
Scrubber media flowrate	once per shift	flowmeter
Scrubber media solids	once every 24 hours	baumé

J. Lime Slaker

Lime produced in the lime kiln discharges into the lime slaker along with any fresh lime makeup. In the slaker, the lime is mixed with water to convert the lime into hydrated lime ($Ca(OH)_2$). Green liquor and lime are fed to the slaker-causticizer assembly and converted to white liquor which is used in the digester.

Particulate emissions from the slaker are controlled using a wet scrubber. Wet scrubbing is considered the most appropriate control alternative for this type of source because the scrubbing media can be reused in the process. The 1991 PSD air license sets forth BACT limits for the lime slaker.

LPP is granted a quarterly 16 hour exemption for short term downtime of the slaker scrubber for maintenance activities and cleaning of the slaker scrubber. The hours of cleaning this equipment shall be documented in a log maintained by the operators.

Lime slakers are not addressed by NSPS 40 CFR Part 60, Subpart BB nor 40 CFR, Part 63.

Periodic Monitoring
LPP shall operate monitors and record the following parameters as specified for the lime slakers:

Periodic monitor	Recording Frequency	Demonstrated With
scrubber pressure drop	Once per shift	differential pressure gauge
scrubber media flowrate	Once per shift	flowmeter

K. Causticizers:

The hydrated lime produced in the lime slaker discharges into the causticizing system. The causticizing system converts the green liquor into white liquor, which is then recycled back to the digester system. LPP's causticizing system includes four causticizing tanks, the first of which has a vent which discharges through a demister pad to the atmosphere.

Particulate emissions from the causticizer are controlled by a wet demister pad scrubber. This control is appropriate for this type of source and is considered BPT.

Causticizers are not addressed by NSPS 40 CFR Part 60, Subpart BB nor 40 CFR Part 63.

L. Fresh Lime Silo

The fresh lime silo, installed in 1958, stores lime and controls particulate emissions by use of a fabric filter baghouse dust collector. Emissions from this system consists primarily of PM and is equipped with a baghouse to control emissions to 10% opacity on a six-minute block average basis except for one six-minute block in a one hour period.

Loading of the lime silo is supervised and an alarm for over-pressurization of the lime silo is present.

M. Multiple Effect Evaporator System:

The spent cooking liquor exiting the digesters, called black liquor, which contains dissolved and suspended inorganic and organic compounds, goes to the multiple effect evaporation system. In the multiple effect evaporators, water is evaporated out of the liquid to achieve a higher concentration of solids. LPP uses a six-effect evaporation system to increase the black liquor solids to approximately 49% solids by weight. LPP also has one concentrator and one crystallizer to further increase the black liquor solids (BLS) concentration to about 70% by weight.

The regulated pollutants emitted from the multiple effect evaporator system are TRS (total reduced sulfur) and methanol, which are collected and incinerated in the lime kiln. The multiple effect evaporators were installed prior to September 24, 1976 and are therefore not subject to NSPS 40 CFR Part 60, Subpart BB for Kraft Multiple Effect Evaporators.

The evaporators are part of LPP's LVHC system for the purposes of MEDEP Chapter 124 and as such they are subject to 40 CFR Part 63, Subpart S per §63.443(a)(1)(i).

N. Smelt Dissolving Tank

The Smelt Dissolving Tank was manufactured by Hamilton and Son Inc. and installed at LPP in 1972. During the combustion of black liquor in the #2 Recovery Boiler, the heating value of the lignin is released and the cooking chemicals are recovered as either smelt or salt cake. Pulping chemicals left over after combustion of black liquor in the recovery boiler, which is primarily sodium and sulfur compounds, collect in the bottom of the recovery boiler as molten "smelt". The smelt flows out of the bottom of the recovery boiler to the smelt dissolving tank, where the hot smelt mixes with water to form green liquor. Steam is generated and vented from the smelt tank.

LPP controls PM emissions from the smelt tank using a demister with a limit of 0.2 lb/ton BLS. Particulate emissions from smelt tanks are comprised of finely divided smelt particles that become entrained in the exhaust gases. Demisters, or mist eliminator pads, are constructed with fine wire mesh. Droplets condense on the mesh and are washed back into the smelt tank by water sprays.

LPP was granted per license amendment #21 (A-177-71-X-M) a quarterly 16 hour exemption for short term downtime on the smelt tank's particulate control equipment for cleanings of the demister pad. The hours of cleaning this equipment shall be documented in a log maintained by the operators.

The smelt tank was constructed prior to September 24, 1976 and is therefore not subject to NSPS 40 CFR Part 60, Subpart BB for Kraft Smelt Tanks. However, the smelt tank is subject to 40 CFR Part 63, Subpart MM, Standards for Hazardous Air Pollutants from Chemical Recovery Combustion Sources at Kraft Pulp Mills.

Streamlining

Particulate Matter
LPP accepts streamlining for particulate matter requirements. 40 CFR Part 63, §63.862(a)(1)(i)(B) and BPT requirements are applicable. The Best Practical Treatment (BPT) particulate matter limit is more stringent. Therefore, only the more stringent BPT particulate matter limit is included in this license.

O. #6 and #7 Tissue Manufacturing Process with Oil Fired Dryers

The #6 and #7 tissue dryers fire #2 fuel oil with a sulfur content not to exceed 0.5% by weight. The maximum capacities of each of these tissue dryers are 108 gallons per hour. Regulated pollutants from the #6 and #7 tissue dryers are PM, PM10, SO2, NOx, CO, and VOCs. The use of #2 fuel oil with a maximum sulfur content of 0.5% by weight is considered Best Practical Treatment (BPT). No significant amounts of regulated air pollutants are expected from these sources.

P. Waste Treatment Plant:

LPP operates a wastewater treatment plant on-site. The emissions from the plant are fugitive. LPP's wastewater treatment facility is regulated under a National Pollution Discharge Elimination System (NPDES) permit and a State of Maine Waste Discharge License. The operational practice of the treatment facility under these regulatory programs constitutes control of VOC emissions and thus this unit is determined to be meeting VOC RACT.

Q. Emergency Generator

LPP installed an 11.94 MMBtu/hr (1.3 Megawatt) diesel generator for temporary power supply to the Wastewater Treatment Plant. The generator is tied into the Wastewater Treatment Plant such that it will start automatically in the event of a power interruption.

BPT for all pollutants, for this particular emergency generator, is the limitation on operational hours to 1,000 hours per year and the use of #2 fuel. When filling the holding tank of the generator from a fuel supplier the sulfur content shall not exceed 0.05% by weight. However, in extreme situations only (extreme situation is defined as when the generator runs more than 3 hours continuously in response to an unscheduled shutdown which occurs at a time other than between 8:00am and 5:00pm Monday through Friday) LPP may burn #2 fuel oil with a sulfur content above 0.05%, but not to exceed 0.5% by weight. Compliance with the operating hours shall be documented by an hour meter on the unit. Compliance with the sulfur content of the fuel oil shall be documented with fuel receipts. A log documenting the date and time of generator start-up and shut-down shall be maintained.

R. Pulp Dryer

The pulp dryer was installed around 1952. The dryer uses bleached pulp from the pulp mill to produce baled pulp. Water is removed from the pulp by running the sheet across numerous heated dryer cans. The sheet is cut and packaged so that it can be either shipped for use by customers or used internally within the corporation to meet papermaking requirements. The majority of emissions from this source are water vapor.

S. No. 4 and No. 5 Paper Manufacturing Process

LPP has two paper machines in operation (No. 4 and No. 5 paper machines).

No. 4 paper machine is a traditional Fourdrineer type paper machine that has been in service for over 50 years. No. 4 paper machine produces uncoated printing papers.

No. 5 paper machine is also a traditional Fourdrineer paper machine. It has been in service for over 100 years although few of the original parts of the machine remain in operation. No. 5 paper machine currently produces uncoated printing papers.

The majority of emissions from both paper machines are water vapor.

T. No. 6 and No. 7 Tissue Manufacturing Process

LPP has two tissue machines in operation (No. 6 and No. 7 tissue machines).

No. 6 tissue machine was installed in 1964. No. 7 tissue machine was installed in 1978. No. 6 and No. 7 tissue machines produce a variety of both colored and white tissues utilizing bleached pulp from the LPP pulp mill. With the exception of the tissue dryers as discussed in section II. O., the majority of emissions from the manufacturing process of both tissue machines are water vapor.

U. Fugitive Emissions

The sawdust handling system, chip handling system and mill roads are considered to be potential sources of minor fugitive particulate emissions and controls are applied to both. An airfoil system for sawdust control has been installed, and an extensive program of paving mill roads was implemented. Unpaved mill roads are treated with a dust suppressant as required.

There is potential for fugitive particulate emissions from the following pieces of equipment from the #8 power boiler fuel handling and preparation facilities.

- Woodwaste receiving
- Wood Screener/Hogger
- Process fuel storage building
- Coal receiving, crushing, and storage
- Bark screener/destoner
- Sawdust, coal, bark, and biomass conveyors
- Flyash handling system

BPT is applied to reduce fugitive particulate emissions from these sources. LPP will follow the fugitive emission plan outlined in the submittal dated April 12, 2002 to the Department.

1. Woodwaste receiving – the material delivered to the receiver will be woodwaste of 40 to 60 percent moisture, which will not significantly contribute to fugitive emissions. Woodwaste will be received in a partially enclosed hopper to provide further fugitive particulate control. Moisture content will be used as fugitive emission control for all fuels stored on the fuel pad prior to processing equipment.
2. Wood screener/hogger – the screener/hogger building is totally enclosed to prevent fugitive particulate emissions.

3. Process fuel storage building – woodwaste that has been processed is stored in a totally enclosed storage building.
4. Coal receiving, crushing, and storage – coal handling facilities are to include a small building for coal receiving and storage and a hopper feeding system. A belt feeder conveys the coal to a crusher. These facilities will be constructed prior to burning coal and will be enclosed to prevent any potential fugitive emissions.
5. Sawdust, coal, bark, and biomass conveyors – all conveyors are enclosed with half-circle covers, except for the direct conveyor to the boiler that is totally enclosed.
6. Boiler #8's ash handling system – flyash is conveyed to an enclosed silo for storage prior to conditioning. Bottom ash is collected and temporarily stored in a water-filled trough, then conveyed to trucks. All ash collection points in the boiler area are enclosed, including bottom ash handling. Fly ash from the storage silo is conditioned with water prior to transfer to trucks. The trucks will contain the conditioned ash in a totally enclosed manner for transportation to a licensed ash storage facility.
7. Fugitive emissions may result from bark pile reclaim operations. Equipment will be used to reclaim, screen and transport materials from the LPP premises. Activities on the bark pile itself will not result in significant fugitive emissions. Equipment transporting bark pile materials to screening operations for No. 8 power boiler fuel or subsequent transport off-site will utilize unpaved mill roads that are subject to control with dust suppression techniques.

III. VOC RACT

LPP operates the following sources which are subject to VOC RACT pursuant to Chapter 134, Section 3(A) Option D of the Department's regulations:

a. Bleach Plant/ClO_2 Generation
b. Waste Water Treatment Plant
c. Pulp Stock Washer Systems and Pulp Liquor Storage Tanks
d. Digester System, Multiple Effect Evaporator Systems, #2 Recovery Boiler, Smelt Dissolving Tank, and the Lime Kiln

Various other sources, including power boilers, the Kraft recovery furnace, the wood yard, the paper making area and the converting area, are exempt from VOC RACT pursuant to Chapter 134, Section 1(C) of the Department's regulations.

Bleach Plant / ClO_2 Generation

The control of emissions from the bleach plant / ClO_2 generation by the bleach plant scrubber system pursuant to Chapter 122 are determined by

the Department to meet VOC RACT. The Department determined that additional VOC controls for the bleach plant are not feasible at this time.

Waste Water Treatment Plant

By Federal Regulation, LPP is required to comply with their National Pollution Discharge Elimination System (NPDES) permit. By operating a wastewater treatment plant under an NPDES permit, VOC emissions from LPP's waste water treatment facility are controlled; thus the Department determined that LPP's wastewater treatment plant is meeting VOC RACT.*Pulp Stock Washer Systems and Pulp Liquor Storage Tanks*
A VOC RACT economic analysis was conducted on a representative paper mill in Maine. From this analysis, the Department determined that additional VOC controls for this area of the mill is not economically feasible; therefore, it is determined that the current configuration of the pulp stock washer systems and the pulp liquor storage tanks meet VOC RACT.

Digester System and the Multiple Effect Evaporator System

The control of the VOC emissions from the digester system and the multiple effect evaporator system by the lime kiln or the back-up incinerator, complies with Chapter 124 for the control of TRS emissions and is determined to meet VOC RACT. The Department has determined that additional VOC controls for the digester system and multiple effect evaporator systems are not feasible at this time.

Lime Kiln

The control of VOC emissions from the lime kiln by maintaining adequate combustion conditions to comply with Chapter 124 for the control of TRS emissions is determined to meet VOC RACT. The Department had determined that additional VOC controls for the lime kiln is not feasible at this time.

IV. NOx RACT

The NOx RACT amendment (A-177-71-G-A) was issued on April 16, 1996 and incorporated the requirements of Chapter 138 of the MEDEP Air Bureau regulations. The NOx RACT established a lb/MMBtu emission limit, however, the lb/hr limit remained the same as previously licensed. The following emission limits were required per the NOx RACT amendment:

Boiler #3

1. The 66.3 MMBtu/hr Boiler #3 shall not exceed the following emission limits:

Pollutant	lb/MMBtu	(lb/hr)
NO_X	0.45	29.9

2. LPP shall limit NOx emissions from the standby boiler to less than 100 tons per year based on a 12 month rolling total beginning on August 1, 1994. The NOx emissions from standby boiler shall not exceed 20 tons per any calendar month.
3. If operated, the auxiliary/standby boiler shall have an annual tune-up which focuses on optimization and proper maintenance of the combustion equipment. LPP is subject to the tune-up recordkeeping requirements specified in Section 3(L)2 of Chapter 138.

Boiler #6

1. The 127 MMBtu/hr #6 boiler shall not exceed the following emission limits:

Pollutant	lb/MMBtu	(lb/hr)
NO_X	0.40	50.8

2. As further described in this section, stack testing to demonstrate compliance with the NOx RACT limit will be required if the boiler is operated at levels greater than the emissions thresholds set forth in Chapter 138 for auxiliary boilers. If the boiler is operated below such levels, then stack testing is not required. The fuel use threshold that equates to 100 tpy is 3.3 million gallons of No. 6 fuel oil. In either case, LPP will conduct an annual tune-up of the boiler if the boiler is operated more than 1,000 hours in a year.

3. If Boiler #6 is operated more than 1,000 hours in a consecutive 12 month period, it shall have an annual tune-up which focuses on optimization and proper maintenance of the combustion equipment. LPP is subject to the tune-up recordkeeping requirements as specified in Section 3(L)2 of Chapter 138.

4. LPP shall demonstrate compliance with Boiler #6 NOx lb/MMBtu emission limit if fuel usage exceeds 3.3 million gallons on a 12 month rolling total within 60 days of exceeding the fuel threshold, by stack testing in accordance with 40 CFR Part 60 or other method approved or required by the Department. The last stack test was done on December 18, 2001.

5. LPP shall also maintain fuel usage, type of fuel, and fuel heat content records updated on a monthly basis.

Boiler #7

1. The 100.1 MMBtu/hr #7 boiler shall not exceed the following emission limits:

Pollutant	lb/MMBtu	(lb/hr)
NO_X	0.40	40.1

2. As further described in this section, stack testing to demonstrate compliance with the NOx RACT limit will be required if the boiler is operated at levels greater than the emissions thresholds set forth in Chapter 138 for auxiliary boilers. If the boiler is operated below such levels, then stack testing is not required. The fuel use threshold that equates to 100 tpy is 3.3 million gallons of No. 6 fuel oil. In either case, LPP will conduct an annual tune-up of the boiler if the boiler is operated more than 1,000 hours in a year.

3. LPP shall demonstrate compliance with Boiler #7 NOx lb/MMBtu emission limit if fuel usage exceeds 3.3 million gallons on a 12 month rolling total within 60 days of exceeding the fuel threshold, by stack testing in accordance with 40 CFR Part 60 or other method approved or required by the Department. The last stack test was done on December 20, 2001.

4. LPP shall also maintain fuel usage, type of fuel, and fuel heat content records updated on a monthly basis.

Boiler #8

1. The #8 multi-fueled fired boiler shall not exceed the following emission limits:

Pollutant	Lb/MMBtu	lb/hour	
NO_X	0.45, 0.30 [1]	231.3	(based on a twenty four hour block average)

2. Compliance with the NOx RACT emission limit of 0.45 lb/MMBtu emission limit shall be determined by the existing NOx CEM on a 24 hour block average basis excluding periods of start-up, shutdown and malfunction. A 24 hour block average basis shall be defined as midnight to midnight. The NOx CEM will also demonstrate compliance with the 0.30 lb/MMBtu emission limit when firing oil either alone or with other non-fossil fuels based on a 30-day rolling average. LPP shall maintain records demonstrating when oil is fired in the boiler.

[1] See Boiler #8, 2. for description of lb/MMBtu limits.

Recovery Boiler #2

1. The NOx emissions from the Recovery Boiler shall not exceed the following limit:

NOx 233 ppmv (dry basis) @ 8% O_2 dry, 24-hr. block average basis

NOx mass emissions from the #2 Recovery Boiler shall not exceed the following:

Pollutant	lb/hour
NOx	210.6

2. LPP operates and certifies a NOx CEMS on the Recovery Boiler #2 that meets the requirements of Chapter 117 of the Maine DEP Air Bureau regulations. Compliance with the 233 ppmv (dry basis) NOx emission limit, which corresponds to 120 ppmv (wet basis), shall be based on a 24 hour block average basis excluding periods of start-up, shutdown and malfunction. A 24 hour block average basis shall be defined as midnight to midnight.

Lime Kiln

1. The lime kiln shall not exceed the following air emission limits:

Pollutant	ppmv	lb/hr
NO_X	236 ppmv dry basis @ 10% O2, 1-hr average basis	40.4

2. Compliance with the Lime Kiln NOx emission limit of 236 ppmv on a dry basis corrected to 10% O_2, or equivalent dry basis limit taking into consideration stack moisture content and correcting O_2 to 10%, shall be based on stack tests conducted in accordance with the appropriate EPA test methods (40 CFR, Part 60, Appendix A) as specified in this license on an every other year basis.

V. Condensate Conveyance and Control Summary

On July 15, 2002, LPP performed the initial performance test demonstration in the presence of Department representation. Subsequently, the Department received the initial performance test report detailing results. The Department finds that the July 15, 2002 initial performance test and subsequent test report satisfactorily demonstrate compliance with the collection and treatment requirements that are detailed in Subpart S conditions (8), (10), (20), (21), and (23).

As part of EPA's conditional approval letter dated April 15, 2002, the following "narrative" section is taken exactly as it appears in the Equivalency by Permit.

Introduction

Lincoln Pulp and Paper Company, Inc. (LPP) operates a fully integrated kraft pulp and paper mill in Lincoln, Maine. LPP is subject to the Pulp and Paper Industry NESHAP of 40 CFR Part 60, Subpart S, including the condensate collection and treatment requirements of 40 C.F.R. 63.446, for which the Maine DEP granted to LPP under 40 CFR Part 63.6(i)(4) a 1-year compliance extension until April 15, 2002. Briefly, LPP intends to meet the condensate treatment requirements by discharging the condensates below the liquid surface of its biological treatment system (i.e., LPP's aeration basin) as provided in 40 CFR Part 63.446(e)(2). LPP plans to meet the rule's hard pipe condensate conveyance requirements of 40 CFR Part 63.446(d) with the exception that the condensates will pass through the open clarifier prior to the aeration basin, whereas the rule requires a closed system straight to the aeration basin. Therefore, LPP is proposing an alternate compliance program, which must be approved by the MEDEP and USEPA through 40 CFR 63 Subpart E "Equivalency by Permit". This submittal is intended to define the pre-draft Title V license terms and conditions that will be substituted for certain MACT requirements relating to condensate collection and treatment as well as clearly demonstrate that LPP's proposal will achieve HAP reductions beyond MACT requirements.

Equivalency by Permit Overview

Title 40 CFR Part 63.446 contains compliance options from the collection of pulp mill condensates and control of those condensates. LPP will meet the requirements in 63.446(c)(3), which requires that at least 11.1 lbs of methanol/oven dried ton (ODT) of pulp be collected and 63.446(e)(3) which requires that these pulping condensates be treated to achieve at least 92% destruction of the HAPs. However, LPP is proposing an alternative to the requirement in 63.446(d) which requires that the condensates be transported in a closed collection system (commonly referred to as a "hardpipe" system). Several meetings and conference calls between LPP, MEDEP, and USEPA, were held to discuss LPP's alternative approach to compliance. It was determined that Maine can use the legal mechanism outlined in 40 CFR Section 63.94 to write equivalent alternative permit terms through the "Equivalency by Permit" (40 CFR 63 Subpart E) process.

Condensate Conveyance Summary

In 1999 a major portion of Lincoln's pulp mill and recovery sewer system was replaced. The project was designed to eliminate potential vents from the sewer system and to

establish a separate stormwater sewer for the pulp complex. LPP has demonstrated that this upgrade virtually eliminated methanol losses from the sewer. The sewer replacement project was not required for the mill to meet Subpart S. Therefore HAP reductions resulting from the project are considered "beyond compliance" and can be used in the consideration of an equivalency demonstration for an alternative to the condensate collection and treatment requirements in Subpart S.

LPP now proposes to take additional steps to seal the entire new sewer system up to the wetwell for the pulp mill condensates which conveys both regulated and non-regulated condensates. With these steps LPP will meet the intent of 40 CFR Part 63 Subpart S and Subpart RR relating to closed systems. This would eliminate the potential for venting from the process sewer, between the condensate sources and the wetwell area of the wastewater treatment plant. LPP is requesting to utilize its newly upgraded sewer system, with further modifications and inspection requirements, to meet the requirements of a closed collection system. The sewer system, meeting the individual drain system requirements, will convey all pulp mill regulated and non-regulated condensates to the wastewater treatment plant wetwell.

From the partially sealed wetwell, the wastewater containing the HAPs are pumped to the primary clarifier and then conveyed to the secondary biological treatment system aeration basin through closed piping. The wetwell area and clarifier do not meet the conveyance requirements of 63.446(d) therefore an equivalency demonstration must show that any HAP losses across this component of the system are offset by the benefit of conveying wastewaters containing HAPs exceeding the MACT Rule and other volatile compounds through the closed process sewers. The demonstration of equivalency is made by showing that the losses across the wetwell and primary clarifier are less than the credit gained by the projects LPP has undertaken to close its sewer system. The only relief LPP seeks relates to not closing the wet well and clarifier and by showing that the projects from sealing the sewer more than make up for not closing these areas.

LPP's proposal, to seal the entire pulp process sewer, assures that not only will regulated HAPS be collected in excess of 11.1 lbs/ton but also assures that non-regulated sources of wastewater containing methanol are conveyed to treatment in a closed sewer. LPP is receiving credit for collecting and controlling non-regulated sources of methanol from the acid and alkaline sewers from the bleach plant. HAP losses occur from the wetwell and pulp primary clarifier, however, the losses will be offset by the increased collection of HAPs.

Alternative Proposal / Actual and Model Test Results

Using LPP's alternative proposal, LPP will collect the required 11.1 lb/ODT (based on a 15 day rolling average) of regulated condensates and will convey these streams

through a closed system to the wetwell. LPP has sampled and tested sources of methanol on several occasions with the most recent testing being done in April 1999, December 2000, April 2001, and June 2001. The test data shows that LPP is conveying approximately 25 lb/ODT to the wetwell, of which approximately 17.6 lb/ODT is from regulated sources and the remainder from sources not regulated by MACT. The reduction from the wetwell and primary clarifier, based on the most recent inflow and outflow data, show an average methanol loss of 3.6 lb/ODT. Actual testing shows approximately 22 lb/ODT being conveyed to the biological system.

LPP has agreed to conduct a demonstration during its initial performance test to show that the losses from the wetwell, primary clarifier, and the aeration basin are less than the credit (HAP losses eliminated with 1999 sewer rebuild) using the equivalency equation in the license. The 1999 data is used as a baseline as this preceded LPP's conversion to oxygen bleaching and the sewer upgrade project. A letter to the Department dated August 15, 2001 summarizes the testing data and model results.

LPP's Alternative Compliance Plan

LPP has proposed an alternative plan for achieving compliance with the closed collection requirements in 63.446(d). LPP's plan consists of the following elements. The first element is to demonstrate that the losses across the wet well and primary clarifier are less than the credit by testing and using the equivalency equation in the license. Demonstration of this element can be performed again upon request of EPA or the Department by using a Water9 model. LPP will convey a minimum of 11.1 lbs methanol/ODT (from the regulated sources) on a 15 day rolling average into the biological treatment basin. LPP will install a continuous monitoring system to measure the appropriate parameters determined according to 40 CFR 63.453 (i). LPP is also required to destroy 92% or more of all HAPs (methanol measured as a surrogate to all HAPs only when allowed for in the rule) entering the biological treatment basin, including methanol from regulated and non-regulated wastewater streams. Compliance with this element will be demonstrated by sampling HAPs for multi-zone basins as described in 40 CFR Part 63, Appendix C, E. Multiple Zone Concentration Measurements (Procedure 5). On-going compliance is explained in more detail in the Side-by-Side Equivalency Table. LPP will inspect each pulping process condensate collection system, which also contains the acid and alkaline wastewater, according to Section 63.453 (l) on a monthly basis as allowed by EPA in its February 21, 2002 letter. Inspections must be performed once during each calendar month, with at least 21 days elapsed time between inspections. Indications of potential venting (i.e., seal cracks, wisps of steam, loss of trap water level, etc.) will be corrected in accordance with 63.965(b).

The following sections were Attachments to the Equivalency by Permit, which now is incorporated into the narrative of this Title V air emission license.

Lincoln Pulp and Paper (LPP) Company
Equivalency Calculations by EPA

Wetwell and Clarifier losses:
During the initial performance test, LPP will determine the losses from the wetwell and clarifier. LPP will use this data to demonstrate equivalency using the equivalency calculation.

Aeration Basin losses:
During the initial performance test, LPP will determine the losses from the aeration basin. LPP will use this data to demonstrate equivalency using the equivalency calculation.

Loss calculation:
Forty CFR Section 63.446(c) requires sources to get 100% collection of 11.1 lb/ODT and send it to a control device. Since LPP plans to leave the wetwell and clarifier open, then LPP must account for the losses as a percentage of the 11.1 lb/ODT using the equivalency calculation.

Credit calculation:
Before sewer improvements, LPP reported generating 29.25 lb/ODT condensates and wastewater at the point of generation. LPP measured 18.99 lb/ODT at the wetwell. So, 29.25-18.99 = 10.26 lb/ODT collected. EPA took these values from the 2/12/01 summary table of LPP's 4/14/99 tests. However the rule requires 11.1 lb/ODT of the 29.25 lb/ODT to get 100% capture, so only 62.05% of the 10.26 lb/ODT could be used as a credit. Thus 6.37 lb/ODT (62.05% x 10.26) is accountable savings if you assume that they had no openings down stream and 100% destruction.

Equivalency Calculation:
Since the wetwell and clarifier are open and the aeration basin is not 100% efficient, then LPP must reduce the amount to account for actual losses down stream. To determine equivalency, LPP must use the following equation:

11.1 lb/ODT (X) $\leq$ [(6.37 lb/ODT(1 - X)) x (1 - Y)], where

X = percent losses across the wetwell and clarifier determined using the Water9 modeling
Y= percent losses across from the aeration basin determined using Appendix C procedures

Water Impacts of this project

Regulated HAPs are easily biodegraded in LPP's wastewater treatment system. The additional actions required to meet LPP's alternative effluent compliance proposal will not significantly increase the loading on the system and will not negatively impact treatment capabilities or receiving waters. LPP's effluent proposal is not expected to impact LPP's ability to comply with applicable effluent limitations. It is important to note the LPP's recent "EnviroO_2" project completed in 1999, eliminated the use of elemental chlorine to assure compliance with the effluent guidelines in the Cluster Rule and reduced non-regulated methanol emissions. AOx test results have been at very low levels (0.1 Kg/KKg). LPP is unaware of any other kraft mill achieving this level of performance. Dioxin/furan and chlorophenolics have been non-detect.

LPP's Wetwell and Primary Clarifier

LPP's wastewater treatment plant (WTP) wet well and primary clarifier serve several functions critical to and consistent with the proper operation of wastewater treatment facilities. The wet well is basically a large concrete tank that process wastewaters enter. This tank is approximately 30 feet by 8 ½ feet by 10 feet in depth. The first function of the wet well is to remove large solid materials, in the case of a pulp mill primarily bark and wood debris. These materials are removed as the wastewater passes through a bar screen at the wet well's entrance. The openings in this screen are one inch wide; virtually all debris larger than 1 inch is removed at this point. WTP operators periodically rake the solids trapped by the bar screen and remove them from the process. In the wetwell the wastewater's pH is monitored and, if required, adjusted to optimize the biological treatment process occurring in the secondary treatment process. Lastly pumps transfer the wastewater from the wetwell to the primary clarifier. The wetwell allows a controlled and sustained level to avoid pump cavitation. The wastewater enters the primary clarifier at its center. The clarifier is 110 feet in diameter with a 12 foot side depth. In the primary clarifier the wastewater's velocity or speed of travel is significantly reduced. This lower speed allows the majority of the smaller (less than one inch) solids to settle to the bottom of the clarifier. As the solids settle to the bottom of the clarifier, a submerged, slowly rotating rake at the bottom of the clarifier pushes the settled solids to the center of the clarifier. At the bottom center of the clarifier the settled solids are removed from the process. The wastewater leaves the clarifier by passing through weirs along the clarifier's perimeter. From this point the wastewater flows by gravity through a sealed underground pipe and is discharged below the surface of the secondary treatment process (aeration basin) and eventual discharge.

Adequacy and operation of equipment was subject to Best Practical Treatment (BPT) review during NPDES and Maine wastewater licensing. Hydraulic loading of the pulp primary clarifier is rated to 15.0 million gallons per day as per the design operations manual (E.C. Jordan Company, Inc.). Waste treatment plant operations are conducted in accordance with LPP's State and Federal wastewater license.

If LPP makes any physical change or change in the method of operation of the wetwell or the primary clarifier as stated above, LPP must demonstrate that it still meets compliance with the equivalency calculation.

Conclusions

The Equivalency by Permit (EBP) was conditionally approved by EPA on April 15, 2002 and outlined the air emission license conditions and requirements. Based on the information submitted, LPP's alternative plan will achieve equivalent emission reductions of regulated sources required by the NESHAP and additional control of HAPs and volatile compounds. The alternative permit terms and conditions, as stated in the EBP, is incorporated into this Title V operating permit under the authority of 40 CFR Section 63.94.

VI. Facility Emissions

The following is the sum of all emission limits allowed in this license (for all emission equipment in section I. B. of this Title V license) which is used to calculate the license fees.

Annual Emissions for the Facility
(used to calculate the license fee)

Pollutant	Tons/Year
PM	435.9
PM_{10}	435.9
SO_2	2231.8
NO_X	2080.9
CO	2866.2
VOC	229.4

VII. AMBIENT AIR QUALITY ANALYSIS

According to the Maine Regulations Chapter 140, the level of air quality analyses required for a renewal source shall be determined on a case-by case basis. At this time, LPP is not proposing any new equipment, therefore the existing modeling used for air emission and increments license A-177-71-A/R demonstrates compliance with ambient air quality standards is accurate and additional modeling is not required for this renewal.

ORDER

Based on the above Findings and subject to conditions listed below, the Department concludes that the emissions from this source:

- will receive Best Practical Treatment,
- will not violate applicable emission standards,
- will not violate applicable ambient air quality standards in conjunction with emissions from other sources.

The Department hereby grants the Part 70 License A-177-70-A-I pursuant to MEDEP Chapter 140 and the preconstruction permitting requirements of MEDEP Chapter 115 and subject to the standard and special conditions below.

All Federally enforceable and State-only enforceable conditions in existing air licenses previously issued to LPP pursuant to the Department's preconstruction permitting requirements in Chapters 108 or 115 have been incorporated into this Part 70 license, except for such conditions that MEDEP has determined are obsolete, extraneous or otherwise environmentally insignificant, as explained in the findings of fact accompanying this permit. As such the conditions in this license supercede all previously issued air license conditions.

Federally enforceable conditions in this Part 70 license must be changed pursuant to the applicable requirements in Chapter 115 for making such changes and pursuant to the applicable requirements in Chapter 140.

For each standard and special condition which is state enforceable only, state-only enforceability is designated with the following statement: **Enforceable by State-only**.

STANDARD STATEMENTS

(1) Approval to construct shall become invalid if the source has not commenced construction within eighteen (18) months after receipt of such approval or if construction is discontinued for a period of eighteen (18) months or more. The

Department may extend this time period upon a satisfactory showing that an extension is justified, but may condition such extension upon a review of either the control technology analysis or the ambient air quality standards analysis, or both;

(2) The Part 70 license does not convey any property rights of any sort, or any exclusive privilege;

(3) All terms and conditions are enforceable by EPA and citizens under the CAA unless specifically designated as state enforceable.

(4) The licensee may not use as a defense in an enforcement action that the disruption, cessation, or reduction of licensed operations would have been necessary in order to maintain compliance with the conditions of the air emission license;

(5) Notwithstanding any other provision in the State Implementation Plan approved by the EPA or Section 114(a) of the CAA, any credible evidence may be used for the purpose of establishing whether LPP has violated or is in violation of any statute, regulation, or Part 70 license requirement.

(6) Compliance with the conditions of this Part 70 license shall be deemed compliance with any Applicable requirement as of the date of license issuance and is deemed a permit shield, provided that:

(a) Such Applicable and state requirements are included and are specifically identified in the Part 70 license, except where the Part 70 license term or condition is specifically identified as not having a permit shield; or
(b) The Department, in acting on the Part 70 license application or revision, determines in writing that other requirements specifically identified are not applicable to the source, and the Part 70 license includes the determination or a concise summary, thereof.

Nothing in this section or any Part 70 license shall alter or effect the provisions of Section 303 of the CAA (emergency orders), including the authority of EPA under Section 303; the liability of an owner or operator of a source for any violation of Applicable requirements prior to or at the time of permit issuance; or the ability of EPA to obtain information from a source pursuant to Section 114 of the CAA.

The following requirements have been specifically identified as not applicable based upon information submitted by the licensee in an application dated September 27, 1997.

SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Facility	Chapter 107	Sulfur Dioxide Standards for Sulfite Pulp Mills	LPP is not a sulfite pulp mill
Facility	Chapter 111	Petroleum Liquid Vapor Storage Control	Fuel oil stored at the facility has a vapor pressure below threshold limits
Facilty	Chapter 123	Paper coating operations	LPP does not coat paper
Facilty	Chapter 132	Graphic Arts-Rotogravure and Flexography	No rotogravure or flexography printing presses
Facilty	Chapter 145	NOx Control Program	No units subject to this
Smelt tank, Evaporators, Recovery Boiler #2, lime kiln	40 CFR Part 60, Subpart BB	Standards of Performance for Kraft pulp mills	Emission units constructed prior to September 24, 1976.
Lime Kiln	Chapter 106	Low Sulfur Fuel	Not subject to 2% limit because equipped with approved sulfur removal device.
Recovery Boiler #2 & Power Boiler #8	Chapter 104	Incinerator Particulate Emission Standard	Units are not considered incinerators per definition of this rule.
Causticizers, Bleach Plant, Kamyr and M&D Digesters	Chapter 101	Visible Emissions	All of these sources emissions are not subject to Chapter 101 because emissions are primarily water vapor.
Boilers #3, #6, & #7	40 CFR 60 Subpart D, Db, Dc	NSPS for Steam Generating Units	Units not subject to D based on size, units not subject to Db and Dc based on applicable installation dates, units installed before 1971.
Boiler #8	40 CFR 60 Subpart D	NSPS for Fossil-Fuel-Fired Steam Generators	Boiler #8 is subject to Subpart Db and construction commenced after June 19, 1986
Boiler #8	40 CFR 60 Subpart Dc	NSPS for Steam Generating Units less than 100 MMBtu/hr	Boiler #8 is greater than 100 MMBtu/hr
Recovery Boiler #2	40 CFR 60 Subpart D, Db, Dc	NSPS for Steam Generating Units	Construction of the recovery boiler was commenced in 1972 and the unit's annual fossil fuel capacity factor is less than 10%
Facility	40 CFR 60 Subpart Da	NSPS for Electric Utility Steam Generating Units	Facility is not an electric utility
Boilers #3, #6, #7, #8	40 CFR 60 Subpart E	NSPS for Incinerators	Units do not burn solid waste consisting of more than 50% municipal waste

SOURCE	CITATION	DESCRIPTION	BASIS FOR DETERMINATION
Coal Handling	40 CFR 60 Subpart Y	NSPS for Coal Preparation Plants	Facility is not a coal preparation plant
Facility	40 CFR 60 Subpart RR	Pressure Sensitive Tape and Label Surface Coating	No applicable sources at this facility
Boiler #8	40 CFR 61 Subpart E	National Emission Standards for Mercury	LPP does not incinerate municipal waste water sludge
Boilers #3, #6, #7, #8	40 CFR Parts 72 thru 78	EPA Acid Rain Program	LPP is not an electric utility unit.

(7) The Part 70 license shall be reopened for cause by the Department or EPA, prior to the expiration of the Part 70 license, if:

(a) Additional Applicable requirements under the CAA become applicable to a Part 70 major source with a remaining Part 70 license term of 3 or more years. However, no opening is required if the effective date of the requirement is later than the date on which the Part 70 license is due to expire, unless the original Part 70 license or any of its terms and conditions has been extended pursuant to Chapter 140;

(b) Additional requirements (including excess emissions requirements) become applicable to a Title IV source under the acid rain program. Upon approval by EPA, excess emissions offset plans shall be deemed to be incorporated into the Part 70 license;

(c) The Department or EPA determines that the Part 70 license contains a material mistake or that inaccurate statements were made in establishing the emissions standards or other terms or conditions of the Part 70 license; or

(d) The Department or EPA determines that the Part 70 license must be revised or revoked to assure compliance with the applicable requirements.

The licensee shall furnish to the Department within a reasonable time any information that the Department may request in writing to determine whether cause exists for modifying, revoking and reissuing, or terminating the Part 70 license or to determine compliance with the Part 70 license.

(8) No license revision or amendment shall be required, under any approved economic incentives, marketable licenses, emissions trading and other similar programs or processes for changes that are provided for in the Part 70 license.

STANDARD CONDITIONS

(1) Employees and authorized representatives of the Department shall be allowed access to the licensee's premises during business hours, or any time during which any emissions units are in operation, and at such other times as the Department deems necessary for the purpose of performing tests, collecting samples, conducting inspections, or examining and copying records relating to emissions and this license (Title 38 MRSA §347-C);

(2) The licensee shall acquire a new or amended air emission license prior to commencing construction of a modification, unless specifically provided for in Chapter 140;

(3) The licensee shall establish and maintain a continuing program of best management practices for suppression of fugitive particulate matter during any period of construction, reconstruction, or operation which may result in fugitive dust, and shall submit a description of the program to the Department upon request;

(4) The licensee shall pay the annual air emission license fee to the Department, calculated pursuant to Title 38 MRSA §353.

(5) The licensee shall maintain and operate all emission units and air pollution control systems required by the air emission license in a manner consistent with good air pollution control practice for minimizing emissions;

(6) The licensee shall retain records of all required monitoring data and support information for a period of at least six (6) years from the date of the monitoring sample, measurement, report, or application. Support information includes all calibration and maintenance records, digital data, and all original strip-chart recordings for continuous monitoring instrumentation, and copies of all reports required by the Part 70 license. The records shall be submitted to the Department upon written request or in accordance with other provisions of this license;

(7) The licensee shall comply with all terms and conditions of the air emission license. The submission of notice of intent to reopen for cause by the Department, the filing of an appeal by the licensee, the notification of planned changes or anticipated noncompliance by the licensee, or the filing of an application by the licensee for the renewal of a Part 70 license or amendment shall not stay any condition of the Part 70 license.

(8) In accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department, the licensee shall:

(a) perform stack testing under circumstances representative of the facility's normal process and operating conditions:

(i) within sixty (60) calendar days of receipt of a notification to test from the Department or EPA, if visible emissions, equipment operating parameters, staff inspection, air monitoring or other cause indicate to the Department that equipment may be operating out of compliance with emission standards or license conditions;

(ii) to demonstrate compliance with the applicable emission standards; or

(iii) pursuant to any other requirement of this license to perform stack testing.

(b) install or make provisions to install test ports that meet the criteria of 40 CFR Part 60, Appendix A, and test platforms, if necessary, and other accommodations necessary to allow emission testing; and

(c) submit a written report to the Department within thirty (30) days from date of test completion.

(9) If the results of a stack test performed under circumstances representative of the facility's normal process and operating conditions indicates emissions in excess of the applicable standards, then:

(a) within thirty (30) days following receipt of such test results, the licensee shall re-test the non-complying emission source under circumstances representative of the facility's normal process and operating conditions and in accordance with the Department's air emission compliance test protocol and 40 CFR Part 60 or other method approved or required by the Department; and

(b) the days of violation shall be presumed to include the date of stack test and each and every day of operation thereafter until compliance is demonstrated under normal and representative process and operating conditions, except to the extent that the facility can prove to the satisfaction of the Department that there were intervening days during which no violation occurred or that the violation was not continuing in nature; and

(c) the licensee may, upon the approval of the Department following the successful demonstration of compliance at alternative load conditions, operate under such alternative load conditions on an interim basis prior to a demonstration of compliance under normal and representative process and operating conditions.

(10) The licensee shall maintain records of all deviations from license requirements. Such deviations shall include, but are not limited to malfunctions, failures, downtime, and any other similar change in operation of air pollution control systems or the emission unit itself that is not consistent with the terms and conditions of the air emission license.

a. The licensee shall notify the Commissioner within 2 business days of a violation in emission standards and/or a malfunction or breakdown in any component part that causes a violation of any emission standard, and shall report the probable cause, corrective action, and any excess emissions in the units of the applicable emission limitation;

b. The licensee shall submit a report to the Department on a quarterly basis if a malfunction or breakdown in any component part causes a violation of any emission standard, together with any exemption requests.

Pursuant to 38 MRSA § 349(9), the Commissioner may exempt from civil penalty an air emission in excess of license limitations if the emission occurs during start-up or shutdown or results exclusively from an unavoidable malfunction entirely beyond the control of the licensee and the licensee has taken all reasonable steps to minimize or prevent any emission and takes corrective action as soon as possible. There may be no exemption if the malfunction is caused, entirely or in part, by poor maintenance, careless operation, poor design or any other reasonably preventable condition or preventable equipment breakdown. The burden of proof is on the licensee seeking the exemption under this subsection.

c. All other deviations shall be reported to the Department in the facility's semiannual report.

(11) Upon the written request of the Department, the licensee shall establish and maintain such records, make such reports, install, use, and maintain such monitoring equipment, sample such emissions (in accordance with such methods, at such locations, at such intervals, and in such manner as the Department shall prescribe), and provide other information as the Department may reasonably require to determine the licensee's compliance status.

(12) The licensee shall submit semiannual reports of any required periodic monitoring. All instances of deviations from Part 70 license requirements must be clearly identified in such reports. All required reports must be certified by a responsible official.

(13) The licensee shall submit a compliance certification to the Department and EPA at least annually, or more frequently if specified in the applicable requirement or by the Department. The compliance certification shall include the following:

(a) The identification of each term or condition of the Part 70 license that is the basis of the certification;

(b) The compliance status;

(c) Whether compliance was continuous or intermittent;

(d) The method(s) used for determining the compliance status of the source, currently and over the reporting period; and

(e) Such other facts as the Department may require to determine the compliance status of the source;

SPECIFIC CONDITIONS

(14) LPP shall meet the following requirements for the #2 Recovery Boiler:

A. The emissions from the Recovery Boiler shall not exceed the following limits: [MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

PM	0.044 gr/dscf @ 8% O_2
SO_2	141 ppmv (dry basis) @ 8% O_2, 24 hr. block average basis
NOx	233 ppmv (dry basis) @ 8% O_2, 24-hr. block average basis
CO	500 ppmv (wet basis) @ 8% O_2
VOC	200 ppmv (wet basis) @ 8% O_2
TRS	5 ppm @ 8% O_2, 12 hr. block average basis, at the recovery boiler outlet* 15 ppm @ 8% O_2, 12 hr. block average basis, at the ESP outlet*

* Limits do not apply during first 24 hours of start-up.

B. Mass emissions from the #2 Recovery Boiler shall not exceed the following: [MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

Pollutant	lb/hour
PM	38.8
PM_{10}	38.8
SO_2	149.7
NOx	210.6
CO	320.4
VOC	73.3

C. LPP shall continuously monitor TRS from the #2 Recovery Boiler from the outlet of the ESP by using a CEM according to Chapter 117. TRS shall not exceed 40 ppm @ 8 O_2 (dry basis) averaged from the east and west stacks combined, for the first 12 hours during start-up and TRS shall not exceed 25 ppm (averaged from the east and west stacks combined) for the second 12 hours of start-up. The recovery boiler, at times, also operates with total flow through a single stack. In this event, TRS compliance would be based on the reading from the single stack. [MEDEP 1991 PSD Permit (A-177-71-A/R)]

Except for the first 24 hours of start-up, Recovery Boiler #2 shall not exceed a TRS limit of 15 ppm corrected to 8% O_2 measured as H_2S. Compliance with the TRS ppm emission limit shall be on a 12-hr block average basis and demonstrated by means of a CEMS on the stack. [MEDEP Chapter 124, TRS] [MEDEP Chapter 140, BPT].

Hourly TRS concentrations will be averaged from data recorded from both stacks' TRS monitors. The recovery boiler, at times, also operates with total flow through a single stack. In this event, TRS compliance would be based on the reading from the single stack and not averaged with zero emission from the other stack. Non-compliance determination and reporting will be based on the combined stack average TRS concentration corrected to 8% O_2 for a 12-hr block average basis.

The quarterly reports will contain the total number of twelve (12)-hour block averaging periods in the quarter, which include periods of start up, shutdown or malfunction, but exclude periods when LPP is not operating. The following periods of excess emissions are not a violation of Chapter 124 or of this license:

- For Recovery Boiler #2, the first two twelve (12)-hour block averages in a quarter which exceed either license limits or the emission standards of Section 3(H) or 3(I) of Chapter 124. [MEDEP Chapter 124, BPT]

D. During start-up, the SO_2 limit in condition 14(A) does not apply. During start-up hourly oil combustion rates shall not exceed 1,357 gal/hour of #6 fuel oil with a sulfur content not to exceed 2.0% by weight or 0.7% based on operating scenarios in condition (20). [MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

E. LPP shall maintain records of annual #6 fuel use indicating the quantity of fuel consumed (gallons) and the percent (%) sulfur content of the fuel by weight demonstrated by purchase records from the supplier. The sulfur content of the fuel oil fired in the Recovery Boiler shall not exceed 0.7% or 2.0% by weight based on operating scenarios in condition (20). A log of when oil is fired shall be maintained. [MEDEP Chapter 140, BPT]

F. Recovery Boiler #2 shall not exceed an SO_2 emission limit of 141 ppmv corrected to 8% O_2 on a dry basis. Compliance with the SO_2 lb/hr and ppmv emission limits shall be determined by stack testing using 40 CFR Part 60 Appendix A, Method 6. Stack testing shall be done within 90 days upon receipt of the Department's request. [MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

G. To assure efficient black liquor firing in the Recovery Boiler, LPP shall continuously monitor black liquor solids and record once per shift in the operators' log. LPP will not fire black liquor with solids content below 58% to assure efficient combustion.

H. Recovery Boiler #2 shall not exceed a particulate limit of 0.044 grains/dscf corrected to 8% O_2 for PM. Compliance with the gr/dscf and lb/hr particulate matter limits shall be determined on the basis of stack testing performed in calendar year 2003, and once every two years thereafter in accordance with 40 CFR Part 60, Appendix A, Method 5. [MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

I. LPP shall maintain the following:

Parameter for recovery boiler	**Recording Frequency**	**Demonstrated With**
Black liquor firing rate	once every 24 hours	flowmeter
Black liquor solids	once every 24 hours	refractometer
Operating ESP T.R. set voltage and amp	once per shift	amp meter

J. Recovery Boiler #2 shall not exceed a NOx limit of 233 ppmv corrected to 8% O_2 on a dry basis. Compliance with the NOx ppmv emission limit shall be on a 24-hr block average basis excluding periods of start-up, shutdown and malfunction, demonstrated by means of a CEMS on the stack.

Hourly NOx concentrations will be averaged from data recorded from both stacks' NOx monitors. The recovery boiler, at times, also operates with total flow through a single stack. In this event, NOx compliance would be based on the reading from the single stack and not averaged with zero emission from the other stack. Non-compliance determination and reporting will be based on the combined stack average NOx concentration corrected to 8% O_2 dry basis for a 24-hr block average. [MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 38, NOx RACT]

K. LPP has installed, calibrated and shall maintain on each stack a COM in accordance with Chapter 117. Beginning October 1, 2002, visible emissions from the #2 Recovery Boiler shall not exceed an opacity of 20% (based on the average of both stacks respective 6 minute block averages) for 98 percent of all six (6) minute block average on a quarterly basis and 99 percent on an annual basis. Quarterly basis shall be the period of time from January 1 to March 31, April 1 to June 30, etc. LPP may apply for exemptions due to start-up as allowed for under 38 M.R.S.A Section 349 Subsection 9. Visible emissions in excess of 20% opacity but within the quarterly 2 percent or annual 1 percent allowances in this paragraph shall not constitute excess emissions or violations under this license. LPP may still apply for exemption of exceedances as allowed for by Maine Statute, 38 M.R.S.A. Section 349 subsection 9.

Beginning March 12, 2004, Recovery Boiler units are required to implement corrective action, as specified in the startup, shutdown, and malfunction plan prepared for each unit under 40 CFR 63.866(a), when the average of ten (10) consecutive six (6) minute block averages results in a measurement greater than 20 percent opacity. [MEDEP Chapter 101, BPT]

The recovery boiler, at times, also operates with total flow through a single stack. In this event, opacity compliance would be based on the reading from the single stack and not averaged with zero emission from the other stack. Two percent (2%) of block averages in a quarter may exceed 20%. Non-compliance determination and reporting will be based on the average opacity number. [MEDEP Chapter 140, BPT]

(15) Boiler #3 shall comply with each of the following:

A. Boiler #3 shall fire #6 fuel oil with a sulfur content not to exceed 2.0 % by weight and/or greater than 0.7% by weight under certain operating scenarios. Refer to Condition (20) for operating scenarios. [MEDEP 1991 PSD Permit (A-177-71-A/R)]

B. Boiler #3 shall not operate more than 4,320 hours per year (12 month rolling total), with a log maintaining the hours of operation, and will be operated as a stand-by unit as per Chapter 138 of the Maine Air Regulations. [MEDEP Chapter 138]

C. LPP shall maintain records of annual #6 fuel use indicating the quantity of fuel consumed (gallons) and the percent (%) sulfur content of the fuel by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

D. Boiler #3 shall not exceed the following emission limits:
[MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

Pollutant	lb/MMBtu	lb/hr
PM	0.15	8.0
PM10	--	8.0
SO2	--	139.4
NOx	0.45	29.9
CO	--	13.3
VOC	--	0.7

E. Compliance with PM emission limits shall be determined on the basis of stack tests done every other year in accordance with EPA Method 5 within 60 days if operated more than 1000 hours per calendar year. Only years in which the boiler is operated more than 1,000 hours shall be included in determining the necessary testing frequency under this paragraph.[MEDEP Chapter 140, BPT]

F. Standby boiler #3 shall have an annual tune-up, which focuses on optimization and proper maintenance of the combustion equipment if operated more than 2,000 hours since the previous annual tune-up. LPP is subject to the tune-up recordkeeping requirements as specified in Section 3(L) 2 of Chapter 138. [MEDEP Chapter 138]

(16) Boiler #6 shall comply with the each of the following:
[MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

A. Boiler #6 shall fire #6 fuel oil with a sulfur content not to exceed 2.0% by weight. The sulfur content of the #6 fuel oil fired in Power Boiler #6 shall not exceed 0.7% by weight when operating #7 boiler, or when the #8 boiler is burning oil, or when the #2 recovery boiler is burning 100% oil. Boiler #6 may fire off-specification waste oil. Refer to Condition (20) for operating scenarios. [MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

B. LPP shall clean burner tips, atomizing diffusers, and oil strainers on an as needed basis to maintain efficient boiler operation. LPP shall do annual boiler instrumentation calibrations as part of Best Practical Treatment. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

C. LPP shall maintain records of annual #6 fuel use indicating the quantity of fuel consumed (gallons) and the percent (%) sulfur content of the fuel by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

D. Boiler #6 shall not exceed the following emission limits:
[MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

Pollutant	**lb/MMBtu**	**lb/hr**
PM	0.15	19.1
PM_{10}	-	15.2
SO_2	-	266.9
NOx	0.40	50.8
CO	--	25.4
VOC	--	1.3

E. If boiler #6 fuel usage exceeds 3.3 million gallons on a 12 month rolling total, compliance with the lb/MMBtu particulate matter emission limits shall be determined on the basis of stack testing performed within 60 days of exceeding the fuel threshold in accordance with 40 CFR Part 60 Appendix A, Method 5. [MEDEP Chapter 140, BPT]

F. LPP shall demonstrate compliance with Boiler #6 NOx lb/MMBtu emission limit if fuel usage exceeds 3.3 million gallons on a 12 month rolling total within 60 days of exceeding the fuel threshold, by stack testing in accordance

with 40 CFR Part 60 or other method approved or required by the Department. [MEDEP Chapter 138]

G. If Boiler #6 is operated more than 1,000 hours in a consecutive 12 month period, it shall have an annual tune-up which focuses on optimization and proper maintenance of the combustion equipment. LPP is subject to the tune-up recordkeeping requirements as specified in Section 3(L)2 of Chapter 138. [MEDEP Chapter 138, BPT]

(17) Boiler #7 shall comply with the each of the following:

A. Boiler #7 shall fire #6 fuel oil with a sulfur content not to exceed either 0.7% or 2.0% by weight, depending on the operating scenario as specified in Condition (20). The sulfur content of the #6 fuel oil fired in Power Boiler #7 shall not exceed 0.7% by weight when #6 boiler is operating, or when #8 boiler is burning oil or when the #2 recovery boiler is burning 100% oil. Boiler #7 may fire off-specification waste oil.[MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

B. LPP shall clean burner tips, atomizing diffusers, and oil strainers on an as needed basis to maintain efficient boiler operation. LPP shall do annual boiler instrumentation calibrations as part of Best Practical Treatment. [MEDEP Chapter 140, BPT] **Enforceable by State-only**

C. LPP shall maintain records of annual #6 fuel use indicating the quantity of fuel consumed (gallons) and the percent (%) sulfur content of the fuel by weight demonstrated by purchase records from the supplier. [MEDEP Chapter 140, BPT]

D. Boiler #7 shall not exceed the following emission limits:
[MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

Pollutant	lb/MMBtu	lb/hr
PM	0.15	15.0
PM_{10}	-	12.0
SO_2	-	210.4
NOx	0.40	45.1
CO	--	20.0
VOC	--	1.0

E. If boiler #7 fuel usage exceeds 3.3 million gallons on a 12 month rolling total, compliance with the lb/MMBtu particulate matter emission limits shall be

determined on the basis of stack testing performed within 60 days of exceeding the fuel threshold in accordance with 40 CFR Part 60 Appendix A, Method 5. [MEDEP Chapter 140, BPT]

F. LPP shall demonstrate compliance with Boiler #7 NOx lb/MMBtu emission limit if fuel usage exceeds 3.3 million gallons on a 12 month rolling total within 60 days of exceeding the fuel threshold, by stack testing in accordance with 40 CFR Part 60 or other method approved or required by the Department. [MEDEP Chapter 138]

G. If Boiler #7 is operated more than 1,000 hours in a consecutive 12 month period, it shall have an annual tune-up which focuses on optimization and proper maintenance of the combustion equipment. LPP is subject to the tune-up recordkeeping requirements as specified in Section 3(L)2 of Chapter 138. [MEDEP Chapter 138, BPT]

(18) Boilers #3, #6, and #7 vent through a common stack. When operating alone, visible emissions shall not exceed an opacity of 30% based on a six (6) minute block average basis, for more than two (2) six (6) minute block averages in a 3-hour period. Visible emissions shall not exceed an opacity of 40% recorded as six (6) minute block averages, for more than three (3) six (6) minute block averages in a 3-hour period, when two or more sources are operating through a common stack. A cold start-up exemption for the first four hours of start-up shall be provided if the unit has been without a fire for 4 hours or more. [MEDEP Chapter 101]

(19) Boiler #8 shall comply with each of the following:

A. Licensed fuels for Boiler #8 include: wood chips, wood room waste, sawdust, sawmill waste, bark pile reclaim (a mixture of bark and waste treatment plant sludge which have accumulated over years and are in various stages of deterioration), coal, fuel oil, on or off-specification waste oil, liquor soap residue, waste treatment plant sludge and waste paper from LPP and Eastern Fine Paper of Brewer, Maine, construction and demolition debris, and tire chips. Boiler #8 is also licensed to burn TRS and NCG gases. Fuel oil fired in the #8 power boiler shall not exceed 0.5% sulfur by weight. Specification waste oil may be burned if the sulfur content is less than 0.5% by weight and the fuel meets specification waste oil standards of the DEP and quantity and type of waste oil burned is recorded. Solid oily waste may be burned provided it is sampled annually and tested for TCLP Metals, PCBs, and TOX. [MEDEP 1991 PSD Permit (A-177-71-A/R)] [MEDEP Chapter 140, BPT]

B. The #8 multi-fueled fired boiler shall not exceed the following emission limits: [MEDEP 1991 PSD Permit (A-177-71-A/R), NSPS, MEDEP Chapter 140, BPT]

Pollutant	lb/MMBtu	Averaging times
PM & PM10	0.02, 0.027	PM and PM10 will meet 0.02 lb/MMBtu when bark pile reclaim and sludge heat inputs ≤ 10%total heat input. PM and PM10 will meet 0.027 lb/MMBtu when bark pile reclaim and sludge heat inputs are > 10% of total heat input. Based on a three-hour average.
SO_2	[a]	Based on a three-hour average.
NOx	0.45, 0.30	The NOx emission limit in lb/MMBtu for Boiler #8 shall not exceed 0.45 lb/MMBtu on all fuels based on a 24 hour block average basis. A 24-hour block average basis shall be defined as midnight to midnight. Periods of start-up, shutdown and malfunction shall not be included in determining 24-hour average lb/MMBtu emissions. Also, LPP shall not exceed the NSPS NOx emission limit of 0.30 lb/MMBtu when firing oil either alone or with other non-fossil fuels based on a 30-day rolling average.
CO	0.7	Based on a three hour average.
VOC	0.052	Based on a three hour average.

[a] SO2 emission limit in lb/MMBtu = (KaHa + KbHb)/(Ha + Hb)
(Based on a 30 day rolling average)
Ka = 1.2 lb/MMBtu
Kb = 0.5 lb/MMBtu
Ha = Heat input from the Combustion of coal in MMBtu
Hb = Heat input from the Combustion of oil in MMBtu

Pollutant	lb/hr	Averaging times
PM & PM10	10.7	Based on a three hour average.
SO_2	267.3	Based on a three hour average.
NOx	231.3	Based on a three hour average.
CO	302.8	Based on a three hour average.
VOC	22.5	Based on a three hour average.

C. Compliance with the NOx RACT emission limit of 0.45 lb/MMBtu shall be determined by the existing NOx CEM on a 24-hour block average basis. A 24-hour block average basis shall be defined as midnight to midnight. Except for periods of start-up, shutdown and malfunction shall not be included in determining 24 hour block average emission rates. The NOx CEM will also demonstrate compliance with the 0.30 lb/MMBtu emission limit when firing oil either alone or with other non-fossil fuels based on a 30-day rolling average. [MEDEP Chapter 138]

D. Compliance with the lb/MMBtu and lb/hour particulate matter emission limits shall be determined by stack testing performed in calendar year 2003 and once every two years thereafter in accordance with 40 CFR Part 60 Appendix A, Method 5. [MEDEP Chapter 140, BPT]

E. The sulfur content of the #2 fuel oil fired in #8 power boiler shall not exceed 0.5% by weight. The sulfur weight percent shall be demonstrated through purchase records from the supplier. Compliance with SO_2 license limits shall be demonstrated through stack testing within 90 days of a request from the Department. [MEDEP 1991 PSD Permit (A-177-71-A/R), NSPS]

F. Compliance with CO and VOC license limits shall be demonstrated through stack testing within 90 days of a request from the Department. [MEDEP 1991 PSD Permit (A-177-71-A/R), NSPS]

G. LPP shall document times of operation, amount, type of fuel burned, and whether or not TRS is burned in #8 power boiler on a daily basis. The amount of time TRS incineration occurs shall be recorded and made available in quarterly reports. The #8 Power Boiler is designated as a backup TRS/NCG control device. TRS/NCGs shall not be burned in #8 power boiler for more than 400 hours in a calendar quarter. If LPP burns coal, compliance with the SO_2 license emission limits shall be demonstrated through use of a CEMS to be installed within 120 days of burning coal. [MEDEP Chapter 140, BPT and Chapter 117] [MEDEP Chapter 124, BPT]

H. The combined coal and oil heat input shall be $\leq$ 30% (339 MMBtu/hr) of the maximum annual heat input capacity of the boiler while firing fossil fuels. Less than or equal to 30% will be determined using the following equation:

$$\leq 30\% = \frac{(\text{gallons oil/L12M}) \times (\text{BTUs/gal of oil}) + (\text{lb coal/L12M}) \times (\text{BTUs/lb coal})}{(339\ \text{MMBtu/hr}) \times (\text{total hours/L12M})}$$

where L12M = last 12 months

I. Visible emissions shall not exceed an opacity of 20% based on a six (6) minute block average basis except for one (1) six (6) minute block average period of no more than 27% opacity. Compliance with the opacity limit shall be demonstrated by means of a continuous opacity monitor (COM). [MEDEP 1991 PSD Permit (A-177-71-A/R), NSPS]

J. Periodic monitoring shall consist of for oil fired in Power Boiler #8, fuel supplier receipts showing sulfur content of the oil, and recordkeeping which includes fuel

use records and fuel analysis records. LPP shall monitor and record the operating ESP T.R. set voltage and amperage once per shift.

Parameter	Recording Frequency	Demonstrated With
Feed water rate	once every 24 hours	flowmeter
Fuel oil firing rate	once every 24 hours	flowmeter
Operating ESP T.R. Set voltage and amp	once per shift	amp meter

K. LPP can burn oily solid waste, from LPP's and Eastern Fine Paper's processes, in Power Boiler #8. The required testing of the solid oily waste shall be as follows:
- LPP shall collect a representative solid oily waste sample annually. The sample of solid oily waste shall be analyzed for metals (As, Ba, Cd, Cr, Pb, Hg, Se, Ag), Polychlorinated biphenyls (PCBs), Total Organic Halogens (TOX), (High) Heat Value, Ash Content, Moisture Content, and Sulfur.
- The testing of a representative grab sample shall be done annually. Oily solid waste containing levels of TCLP metals considered hazardous under DEP regulations shall not be burned. The allowable levels for PCB and total halogens shall be consistent with DEP guidelines for off-specification oil.
- LPP shall record the tons of oily solid waste combusted and maintain the analytical data from the material tested. This information shall be made available upon DEP's request.

[MEDEP Chapter 140, BPT]

(20) LPP shall operate the facility in accordance with the restrictions given below, and shall maintain sufficient records to document compliance with each. Unless otherwise specified, compliance shall be demonstrated by means of the appropriate EPA reference test methods, and the compliance averaging time shall be the same as that used in the appropriate EPA reference test method. [MEDEP Chapter 140, BPT]

A. If both the recovery boiler and the #8 power boiler are operating, only one of the other three oil fired power boilers (#3, #6, and #7) shall be operating.

B. If the #8 power boiler is not operating and the recovery boiler is operating, then LPP may operate power boilers #3, #6, and #7 concurrently. When the recovery boiler is firing 100% oil, the sulfur content of the fuel oil being burned in it shall not exceed 0.7% sulfur by weight. At all other times, the fuel oil being fired in the recovery boiler shall not exceed 2.0% sulfur by weight. Hours of operation for the recovery boiler firing 100% oil shall be limited to a total of 350 hours over every consecutive 12-month period.

C. When only one of power boilers #3, #6, or #7 are operating, and the recovery boiler is firing some black liquor, and power boiler #8 is not burning fossil fuels and not incinerating TRS gases, then the one operating power boiler (#3, #6, or #7) may burn a fuel oil with a sulfur content up to 2.0% by weight. Power boilers #3, #6, and #7 shall burn oil with a sulfur content not to exceed 0.7% by weight under all other operating conditions.

D. LPP shall have in place a system for measuring and recording the amount and type of such fuel burned.

E. For all the operating conditions in this air emissions license, a unit shall be considered "operating" or "in operation" if any fuel is being combusted in it and steam is being produced. For those units not allowed to operate concurrently, one may be in start-up and the other in shutdown for an overlapping period not to exceed 8 hours. If one of the units in question is the recovery boiler, the overlapping period shall not exceed 12-hours.

(21) The Bleach Plant / Chlorine Dioxide Generation system shall comply with each of the following: [MEDEP Chapter 122] **State Enforceable Only**

A. Total ClO_2 emissions shall not exceed 3.0 lb/hr.

B. Compliance testing of controlled sources shall be done downstream of the scrubber and shall include collected and uncollected bleach plant emission points using test methods outlined in MEDEP Chapter 122. All stack testing shall comply with the MEDEP stack testing protocol guidelines.

C. Compliance testing shall be performed annually (based on a calendar year) to demonstrate compliance with Cl_2 and ClO_2 emission limits in Chapter 122.

D. For the Bleach Plant Scrubber, LPP shall continue to conduct annual compliance tests to meet the requirements of Chapter 122. Additional testing may be required as the DEP deems it necessary based on the previous analysis, significant changes to the facility equipment or operation, air emission exceedance of the limits specified, repeated or long-term equipment malfunction, or any new information determined to be significant by the DEP.

E. If at any time, LPP desires to use an alternate scrubbing media other than caustic, white liquor, or O_o filtrate in the Cl_2/ClO_2 scrubber, LPP shall conduct compliance tests within 60 days to demonstrate that the emission

limits specified in Chapter 122 are being met. The alternate media shall comply with MEDEP Chapter 122.

F. LPP shall install, calibrate, record and maintain parameter monitors to determine scrubber recycle flow, ORP and pH. LPP shall record this data once per shift and keep records for six years. Bleach Plant parameter monitors shall be calibrated and in use and data recorded once per shift for at least 90% of the source uptime during each quarter. The facility shall monitor and record the following for the Bleach Plant Scrubber System and the ClO_2 Generation Plant Scrubber System:

Parameter for each scrubber	Recording Frequency	Demonstrated With
Recycle flow	once a shift	flowmeter
Fluid ORP/pH	once a shift	probe

(22) The Lime Kiln shall comply with each of the following:

A. The lime kiln shall not exceed the following air emission limits:
[MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

Pollutant	ppmv	lb/hr
PM	---	20.9
PM_{10}	---	20.9
SO_2	50 ppmv wet basis @ 10% O_2, 3-hr average basis	14.1
NO_x	236 ppmv dry basis @ 10% O_2, 1-hr average basis	40.4
CO	220 ppmv wet basis @ 10% O_2, 3-hr average basis	27.1
VOC	25 ppmv wet basis @ 10% O_2, 3-hr average basis	1.8
TRS	20 ppmv wet basis @ 10% O_2, 12-hr block average	---

B. Compliance with the Lime Kiln NOx emission limit of 236 ppmv on a dry basis corrected to 10% O_2, or equivalent wet basis limit correcting O_2 to 10%, shall be based on a stack tests conducted during calendar year 2003 and every other year thereafter in accordance with the appropriate EPA test methods (40 CFR, Part 60, Appendix A). LPP shall submit a written report of the NOx emission demonstration within 30 days after the stack test was conducted. [MEDEP Chapter 138, NOx RACT]

C. LPP shall limit PM emissions to 0.13 gr/dscf at 10% O_2. Compliance with PM emissions shall be determined on the basis of stack testing done in calendar year 2003 and every other year thereafter. [MEDEP Chapter 140, BPT]

D. The lime kiln shall not exceed a TRS limit of 20 ppmv corrected to 10% O_2 on a dry basis, measured as H2S. Compliance with the TRS ppmv emission limit shall be determined on a 12-hr block average basis, as described in 40 CFR Part 60, Subpart BB and demonstrated by means of a CEMS on the lime kiln. [MEDEP Chapter 124, BPT]

The quarterly reports will contain the total number of twelve (12)-hour block averaging periods in the quarter, which include periods of start up, shutdown or malfunction, but exclude periods when LPP is not operating. The following periods of excess emissions are not a violation of Chapter 124 or of this license:

- For the lime kiln, the first four twelve (12)-hour block averages in a quarter which exceed either license limits or the emission standards of Section 3(K) of Chapter 124. [MEDEP Chapter 124, BPT]

E. LPP shall continuously operate a wet scrubber system to control emissions from the lime kiln. LPP shall monitor and record the following for the lime kiln: [MEDEP Chapter 140, BPT]

Parameter	**Recording Frequency**	**Demonstrated With**
Pressure drop	Once every 8 hours	differential pressure gauge
Scrubber media flowrate	Once every 8 hours	flowmeter
NCG combustion temperature	Once per shift	temperature probe

F. LPP shall comply with the recordkeeping and reporting requirements of 40 CFR Part 63, Subpart MM for the lime kiln by the dates required by that Subpart. [40 CFR Part 63, Subpart MM]

(23) The Lime Slaker shall comply with each of the following: [MEDEP Chapter 140, BPT]

A. The lime slaker shall not exceed 650 ADT/day of pulp (raw material), which is approximately equal to 190 tons per day at 100% CaO. [MEDEP 1991 PSD Permit (A-177-71-A/R)]

B. PM emissions shall be based on the process weight rate per MEDEP Chapter 105. PM emissions shall each not exceed 0.73 lb/hour. [MEDEP Chapter 105]

C. LPP controls PM/PM_{10} emissions by operating a wet scrubber system. LPP shall monitor the media flow rate and pressure drop to the slaker scrubber and record once per shift in a permanent log.

D. LPP shall continuously operate the Wet Scrubber System on the emissions from the lime slaker when the lime slaker is in operation. LPP shall keep records of scrubber downtime. [MEDEP Chapter 140, BPT]

E. LPP may exempt 16 hours per quarter for short term bypass of the slaker scrubber for maintenance activities and cleaning of the slaker scrubber. The hours of maintenance activities and cleaning this equipment shall be documented in a log contemporaneously with the change in method of operation maintained by the operators.

F. LPP shall monitor and record the following for the lime Slaker:

Parameter	**Recording Frequency**	**Demonstrated With**
Venturi pressure drop	once per shift	differential pressure gauge
Scrubber media flowrate	once per shift	flowmeter

[MEDEP Chapter 140, BPT]

(24) The Causticizers shall comply with each of the following:

A. The PM/PM_{10} emissions shall be based on the process weight rate per Chapter 105. The PM and PM_{10} emissions shall each not exceed 1.9 lb/hr, compliance with the licensed limits shall be demonstrated through stack testing when requested by the Department. [MEDEP Chapter 105]

B. LPP shall control particulate emission with the use of a demister pad and shall operate it in accordance with the manufacturer's specification. LPP shall inspect and maintain as necessary once per year.[BPT]

(25) The Lime Silo shall comply with each of the following:

A. Opacity from the lime silo shall not exceed 10% for more than one six (6) minute block average in any one (1) hour period. [MEDEP Chapter 101]

B. LPP shall clean up spills within 24 hours of occurrence of each spill. [BPT]

C. LPP shall inspect all unloading systems when in use for leaks and malfunctions once per shift. If leaks occur, LPP shall discontinue unloading until leaks and/or malfunctions are eliminated. The inspections shall be recorded in a permanent log. Loading of the lime silo will be supervised and an alarm for over-pressurization of the lime silo is required. [MEDEP Chapter 140 BPT]

(26) The Smelt Dissolving Tank shall comply with each of the following:
[MEDEP 1991 PSD Permit (A-177-71-A/R), MEDEP Chapter 140, BPT]

A. Emissions from the Smelt Dissolving Tank shall not exceed the following:

Pollutant		lb/hr
PM	0.20 lb/ton BLS (dry weight)	7.92
PM_{10}	0.20 lb/ton BLS (dry weight)	7.92
SO_2	75 ppmv (wet basis) @ 8% O_2	4.6
TRS	0.033 lb/ton BLS (dry weight)	--

B. LPP shall control particulate emissions from the smelt tank with the use of demister pads. Emissions from the smelt tank shall pass through the demister pad, except for demister pad cleanings. LPP is allowed a short term downtime of the smelt tank's particulate control equipment for cleanings of the demister pad for a time not to exceed 16 hours per quarter. The hours of cleaning this equipment shall be documented in a log contemporaneously with the change in method of operation maintained by the operators. [MEDEP Chapter 140, BPT]

C. Compliance with the limits for PM, PM_{10}, TRS and SO_2 shall be based on stack tests conducted in accordance with the appropriate EPA test methods (40 CFR Part 60, Appendix A). LPP shall stack test the smelt tank to demonstrate compliance with the licensed TRS emission limit during calendar year 2003 and every other year thereafter. [MEDEP Chapter 140, BPT]

(27) The #6 and #7 Tissue Dryers shall comply with each of the following: [MEDEP Chapter 140, BPT]

A. The tissue dryers shall fire #2 fuel oil with a maximum sulfur content not to exceed 0.5% by weight. **State Enforceable Only**

B. The tissue dryers are limited to 108 gallons of fuel oil per hour each. **State Enforceable Only**

C. Emissions from fuel burning from #6 and #7 tissue dryers each shall not exceed:

Pollutant	Lb/hr
PM	0.22
PM10	0.22
SO2	7.7
NOx	2.2
CO	0.54
VOC	0.03

D. Fuel oil containing greater than 2.0% sulfur cannot be used.

(28) The emergency generator at the wastewater treatment plant shall comply with each of the following: [MEDEP Chapter 140, BPT]

A. LPP shall not operate the wastewater emergency generator more than 1,000 hours per year (equates to 85,286 gallons per year of #2 fuel oil).

B. LPP shall keep a log documenting the date and time of generator start-up and shut-down.

C. Documentation on the length of each run of the wastewater treatment plant generator shall be kept by LPP through the use of an hour meter.

D. The emergency generator shall fire only #2 fuel oil with a sulfur content not to exceed 0.05% by weight. In extreme situations only, (when the generator runs for more than 3 hours continuously in response to an unscheduled shut-down which occurs at a time other than between 8:00 am and 5:00 PM Monday through Friday) LPP may burn #2 fuel oil with a sulfur content not to exceed 0.5% by weight.

E. Emissions from the generator shall not exceed the following:

Pollutant	lb/hr
PM	1.4
PM10	1.4
SO2	6.1
NOx	45.0
CO	11.0
VOC	1.5

F. Visible emissions from the generator shall not exceed 30% opacity on a 6 minute block average, except for no more than 2 six minute block averages in a 3-hour period.

(29) LPP shall meet the following "Equivalency by Permit" terms and conditions developed as a condensate collection alternative to 40 CFR Part 63 Subpart S:

Subpart S 63.440 Permit Terms and Conditions

(1) LPP shall meet all applicable requirements of 40 CFR Subpart S Part 63.
(2) LPP shall meet the requirements of 40 CFR Part 63 Subpart A-General Provision of this part as indicated in Table 1 of Part 63 Subpart S.

Subpart S 63.443 Permit Terms and Conditions

(3) LPP shall control HAP emissions from their LVHC system by introducing the gas stream into the flame zone of the lime kiln as a primary combustion source or #8 Power Boiler as a back-up combustion source. LPP shall keep a contemporaneous log as to which combustion unit is being used at a given time. The lime kiln will be used as the primary combustion device at least 85% of the operating time per quarter. The closed vent systems shall meet the requirements as specified in 40 CFR 63.450. Periods of excess emissions reported under 40 CFR Subpart S §63.455 (Condition 18) shall not be a violation of 40 CFR Subpart S §63.443(d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi annual reporting period does not exceed one percent for control devices used to reduce the total HAP emissions from the LVHC system.

(4) By April 17, 2006, LPP shall control HAP emissions from their HVLC system, including their knotter, decker, pulp washing and oxygen delignification systems, as specified in 64.443 (a)(1)(ii). The closed vent systems shall meet the requirements as specified in 40 CFR Subpart S §63.450. Periods of excess emissions reported under 40 CFR Subpart S §63.455 shall not be a violation of 40 CFR Subpart S §63.443(d) provided that the time of excess emissions (excluding periods of startup, shutdown, or malfunction) divided by the total process operating time in a semi annual reporting period does not exceed four percent for control devices used to reduce the total HAP emissions from the HVLC system. Each kraft pulping system shall achieve compliance with the pulping system provisions of 40 CFR Subpart S §63.443 for the equipment listed in 40 CFR 63.443(a)(1)(ii) through (a)(1)(v) by April 17, 2006 and LPP shall establish updates and milestones as specified in 40 CFR Subpart S §63.455 (b).

Subpart S 63. 445 Permit Terms and Conditions

(5) The equipment at each bleaching stage, of bleaching systems listed in paragraph (a) of 40 CFR Subpart S §63.445, where chlorinated compounds are introduced shall be enclosed and vented to the atmosphere at a concentration of less than 10 ppm.

(6) LPP's bleach plant shall meet the 10 ppm limit through process design as allowed by 40 CFR Section 43.445 (b). According to Section 63.453 (m), LPP shall monitor and record D1 uptube temperature as approved by EPA in letter dated August 14, 2002 to demonstrate continuous compliance with applicable control requirements. If the parameter exceeds the minimum or maximum (as appropriate) operating parameter value, scrubbing is not required. When scrubbing is required, LPP will measure the scrubber's process parameters in accordance with 40 CFR Section 63.453(c)(1) and (c)(3). In lieu of the monitoring required under Section 63.453(c)(2), LPP will monitor the scrubber fan amperage according to the EPA approved alternative monitoring as stated in the Sept 3, 2001 letter.

(7) LPP shall not use any hypochlorite or chlorine for bleaching in the bleaching system.

Subpart S 63.446 Alternative Permit Terms and Conditions

[This Condition is an alternative to the MACT standard]

(8) LPP shall meet the requirements of 40 CFR Subpart S §63.446 (d) through an alternate equivalency (hard pipe alternative) demonstration. LPP shall collect and convey process condensates from the digester system, evaporator system, LVHC system, acid and alkaline pulp mill sewers, and after 4/17/2006 the condensates from the HVLC system. LPP shall convey at least 11.1 lbs of total HAP/ton of oven dried pulp based on a 15 day rolling average from their regulated sources through a collection system that meets the requirements in Sections 63.960, 63.961, and 63.962 of Part 63 Subpart RR up to LPP's wetwell and primary clarifier. According to Section 63.453(i), LPP will propose the method of on-going compliance with the required 11.1 lb/ODT after the initial performance test.

[This Condition is an alternative to the MACT standard]

(9) The wetwell is enclosed in a cinder block building with a roof and makeshift door than remains partly sealed. LPP will maintain the existing structure around the wetwell and will keep the door closed except for inspections, raking of screens, and maintenance, thus minimizing emissions. The surface of the clarifier is to remain quiescent. If LPP makes any physical change or change in the method of operation of the wetwell or the primary clarifier, LPP must demonstrate that it still meets compliance with the equivalency calculation. LPP will operate and maintain condensate conveyance in a manner that will minimize HAP losses through volatilization.

(10) LPP shall reduce or destroy 92% of the HAPs collected (while taking into account basin losses) by introducing the primary clarifier discharge under the surface of LPP's aeration basin. Compliance with this element will be demonstrated by sampling HAPs for multi-zone basins as described in 40 CFR Part 63, Appendix C, E. Multiple Zone Concentration Measurements (Procedure 5).

Subpart S 63.450 Permit Terms and Conditions

(11) LPP shall meet the standards specified in 40 CFR Subpart S §63.450 for each applicable closed-vent system or enclosure for capturing and transporting vent streams that contain HAP. LPP shall for each component (including rupture disks, valves, flanges, flame arresters, mist eliminators, gauges, seal pots, and vacuum breakers) of the LVHC closed-vent system that is operated at positive pressure and located prior to the lime kiln or #8 power boiler shall be operated with no detectable leaks as indicated by an instrument reading of less than 500 ppm by volume above background, as measured in the procedures specified in 63.457 (d).

(12) LPP shall for each bypass line in the LVHC system install, maintain, and operate according to manufacture's specifications a flow indicator that provides a record of the presence of gas stream flow in the bypass line at least once every 15 minutes. The bypass lines are on the M&D Digesters, Kamyr digester, evaporators, lime kiln, Power Boiler #8, and Kamyr chip bin. LPP can utilize rupture disks. A break in the rupture disk provides LPP with an immediate failure indication and indication of the presence of gas stream flow. The time (duration) of rupture disk occurrence shall be maintained and recorded. For bypass line valves that are not computer controlled, LPP shall maintain the bypass line valve in the closed position with a car seal or a seal place on the valve or closure mechanism in such a say that valve or closure mechanism cannot be opened without breaking the seal.

Subpart S 63.453 Permit Terms and Conditions

(13) LPP shall perform daily monitoring procedures specified in paragraph (j)(1) and shall conduct a quarterly performance test each quarter using the procedures in Section 63.453(j)(3). LPP shall operate the biological treatment system in a manner consistent with appropriate operating parameter values or procedures required to be monitored according to section 63.453(o) and 63.453(p).

(14) To establish or reestablish, the value for each operating parameter required to be monitored under paragraph (n) of 40 CFR Subpart S §63.453 or to establish appropriate parameters for paragraph (n) of Section 63.453, LPP shall use the following procedure:

- During the initial performance test required in Section 63.457(a) or any subsequent performance test, continuously record the operating parameters;
- Determinations shall be based on the control performance and parameter data monitored during the performance test, supplemented if necessary by engineering assessments and the manufacturer's recommendations;
- Within 60 days of completing the initial performance test, LPP shall provide for the Maine DEP's approval the rationale for the selecting the monitoring parameters necessary to comply with paragraphs (i) and (p) of this section; and
- Provide the Maine DEP rationale for the selected operating parameter value, and monitoring frequency, and averaging time. Include all data and calculations used to develop the value and a description of why the value, monitoring frequency, and averaging time demonstrate compliance with the applicable emission standard.

(15) LPP shall meet the requirements as specified in 40 CFR Subpart S §63.453(i). LPP shall also meet the requirements of 40 CFR Subpart S §63.453(p) when a monitoring parameter excursion occurs when complying with 63.453 (j) of this section.

(16) LPP shall meet the applicable monitoring requirements as specified in 40 CFR Part 63 Subpart S §63.453 (j), for owners or operators using biological treatment system for compliance. The following monitoring procedures shall be maintained:

On a daily basis, monitor the following parameters for the biological treatment unit:

- Composite daily sample of outlet soluble BOD5 concentration to monitor for maximum daily and maximum monthly average.
- Mixed liquor volatile suspended solids
- Horsepower of aerator unit(s).
- Inlet liquid flow and temperature
- Obtain daily inlet and outlet liquid grab samples from the biological treatment unit to have HAP data available to perform quarterly percent reduction test specified in §63.457.

[This Condition is an alternative to the MACT standard]

(17) LPP shall comply with Section 63.453(l). Visual inspections of the pulping process condensate closed collection system, which also contains the acid and alkaline wastewater, will be conducted and documented once during each calendar month, with at least 21 days elapsed time between inspections. Any leak detected will be addressed in accordance with 40 CFR Subpart S §63.964(b). Each enclosure and closed-vent system used to comply with 40 CFR Sec. 63.450(a) shall comply with the requirements specified in paragraphs (k)(1) through (k)(6) of this section.

Subpart S 63.455 Permit Terms and Conditions

(18) LPP shall perform recordkeeping to meet the requirements of 40 CFR Subpart S §63.454 (a), (b), (e), and (f)

Subpart S 63.456 Permit Terms and Conditions

(19) LPP shall meet the applicable reporting requirements as specified in 40 CFR Subpart S §63.455, specifically sections 63.455 (d), (e) and (f).

Subpart S 63.457 Permit Terms and Conditions

(20) LPP shall use appropriate test methods and procedures in 40 CFR Subpart S §63.457 to document compliance with Part 63 Subpart S and alternative requirements approved through Subpart E, Section 63.94. LPP shall follow the procedures specified in section E of appendix C of this part to characterize the open biological treatment system during the initial and any subsequent performance tests.

(21) LPP shall meet the requirement specified in Section 63.457 (L) (1) and (3) to calculate biological treatment percent reduction for non-thoroughly mixed biological treatment systems. LPP will perform the required initial performance test to demonstrate compliance with the standards for kraft pulping process condensates under Section 63.446 within 180 days after April 15, 2002. LPP shall use the procedures identified in Sections 63.457 (c), (d), (g), (j), (L)(1), (m) and (n) to demonstrate initial compliance with the standards for kraft pulping process condensates under Section 63.446.

(22) LPP conducted an initial performance test using the procedures identified in Sections 63.457 (b), (d), (e), (h), and (i) on the bleach plant within 180 days after April 16, 2001. LPP shall continue to conduct annual bleach plant performance tests per Chapter 122 and following the procedures referenced in this condition.

[This Condition is an alternative to the MACT standard]

(23) Within 180 days after April 15, 2002, LPP shall conduct a test to demonstrate equivalency for its alternative compliance approach. LPP shall use the following equation to demonstrate compliance.

Equivalency calculation:

11.1 lb/ODT (X) $\leq$ [(6.37 lb/ODT(1 - X)) x (1 - Y)], where

X = percent losses across the wetwell and clarifier determined using the Water9 modeling
Y= percent losses across from the aeration basin determined using Appendix C procedures.

Subpart S 63.457 Permit Terms and Conditions Continued…

[This Condition is an alternative to the MACT standard]

(24) At any time in the future, EPA or the Department may request LPP to conduct a performance demonstration using the equivalency calculation. EPA or the Department must provide LPP with 60 days notice to conduct a demonstration. If at any time, the testing results show that emission reductions are less than required by 40 CFR 63 Subpart S, then the license shall be reopened and terms and conditions written to reflect the requirements of 40 CFR Subpart S.

(25) LPP plans to use the Water9 model where applicable to demonstrate compliance with respect to any modeled emission rate requirement. LPP may use another model with prior approval from EPA and MEDEP.

(30) LVHC System Equipment Requirements

A. Each digester shall be vented to either the Lime Kiln or Power Boiler #8 when the digester is in use. [MEDEP Chapter 124]

B. The evaporators shall be vented to either the Lime Kiln or Power Boiler #8 when the evaporators are in use. [MEDEP Chapter 124]

C. LPP shall not allow venting of TRS from the LVHC system or associated equipment which:
   1. exceeds 40 minutes in duration; or
   2. contributes to an aggregate TRS venting of more than 1.0% of quarterly operation time. [MEDEP Chapter 124, TRS Control]

   Venting within these parameters are not violations of this license.

D. LPP shall submit quarterly reports which contain all events of venting of TRS from the LVHC system of greater than fifteen (15) minutes when the aggregate TRS venting exceeds 0.5% of quarterly operating time. LPP shall also quarterly report all venting of TRS from the LVHC system or associated equipment for greater than one (1) minute which contributes to an aggregate TRS venting of more than one (1)% of quarterly operating time. [MEDEP Chapter 124, TRS Control]

E. Any TRS/NCG venting greater than 15 minutes shall be reported to the Department within 48 hours. LPP shall submit quarterly reports concerning TRS as required per Chapter 124 of the Maine DEP Air Bureau Regulations and meet the applicable reporting requirements outlined in Section 5(B) & (C) of Chapter 124. [MEDEP Chapter 140, BPT]

(31) HVLC System Equipment Requirements

A. Brown Stock Washer System, Decker, and miscellaneous TRS sources

1. No later than April 17, 2005, the brown stock washer system shall be collected and controlled when the washer system is in use to meet the requirements of Chapter 124 of the Bureau of Air Quality's regulations. [MEDEP Chapter 124, TRS Control]

2. After April 17, 2006, if shower water containing more than 400 ppm by weight of HAPS is used on the Decker, LPP shall collect the NCGs and vent them to the HVLC system. [40 CFR Part 63, Subpart S]

3. After July 1, 2007, if shower water is used on the Decker which causes emissions of TRS greater than 0.75 lb/hr under normal operations, LPP shall collect the NCGs and vent them to the HVLC system. [MEDEP Chapter 124, TRS Control]

4. No later than April 17, 2005 the HVLC system shall maintain a 96% collection and control uptime based on quarterly brownstock washer system operating time on a total mass weighted basis. [MEDEP Chapter 124, TRS Control]

(32) In addition to the other VOC RACT requirements, LPP shall operate its wastewater treatment plant under the authority of a National Pollutant Discharge Elimination System (NPDES) permit.

(33) LPP shall limit fugitive PM emissions as outlined in the fugitive emissions plan submitted the Department on April 12, 2002 and by implementing the following:

a. Woodwaste receiving – the material delivered to the receiver will be woodwaste of 40 to 60 percent moisture, which will not significantly contribute to fugitive emissions. Woodwaste will be received in a partially enclosed hopper to provide further fugitive particulate control. Moisture content will be used as fugitive emission control for all fuels stored on the fuel pad prior to processing equipment.

b. Wood screener/hogger – the screener/hogger building will be totally enclosed to prevent fugitive particulate emissions.

c. Process fuel storage building – woodwaste that has been processed will be stored in a totally enclosed storage building.

d. Coal receiving, crushing, and storage – coal handling facilities are to include a small building for coal receiving and storage and a hopper feeding system. A belt feeder will convey the coal to a crusher. These

facilities will be will be constructed prior to burning coal and enclosed to prevent any potential fugitive emissions.

e. Sawdust, coal, bark, and biomass conveyors – all conveyors will be enclosed with half-circle covers, except for the direct conveyor to the boiler that will be totally enclosed.
f. Power Boiler #8 ash handling system – Flyash will be conveyed to an enclosed silo for storage prior to conditioning. Bottom ash will be collected and temporarily stored in a water-filled trough, then conveyed to a truck on site. All ash collection points in the boiler area are completely enclosed, including bottom ash handling. Fly ash from the storage silo will conditioned with water prior to transfer to trucks. The trucks will contain the conditioned ash in an enclosed manner for transportation a licensed ash storage facility.
g. Fugitive emissions may result from bark pile reclaim operations. Equipment will be used to reclaim, screen and transport materials from the LPP premises. Activities on the bark pile itself will not result in significant fugitive emissions. Equipment transporting bark pile materials to screening operations for No. 8 power boiler fuel or subsequent transport off-site will utilize unpaved mill roads that are subject to control with dust suppression techniques on an as needed basis.
h. Visible emissions from any fugitive emission source shall not exceed an opacity of 20 percent except for no more than five (5) minutes in any 1-hour period. Compliance shall be determined by an aggregate of the individual fifteen (15)-second opacity observations which exceed 20 percent in any one (1) hour.

(34) Parts Washers

LPP shall label any parts washers with operational standards, equip the washers with covers if the vapor pressure is >15 mmHG at 100°F, close covers when not in use, drain parts for 15 seconds or longer, keep drafts < 40 m/minute, repair leaks, and keep records of solvent added and removed. LPP shall not degrease porous material. [MEDEP Chapter 130]

(35) Recordkeeping Requirements

CEMS, COMS, and Parameter Monitors

The CEMS, COMS, and parameter monitors required by this license shall be the primary means of demonstrating compliance with emission standards set by this Order, statute, state or federal regulation, as applicable. The licensee shall comply with the following: [MEDEP Chapter 140, BPT]

A. **Performance Specifications**

All CEMS and COMS shall meet the sampling and performance criteria specified in 40 CFR Part 51 Appendix P, and shall be operated in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Departments regulations.

1. If the continuous emission monitoring system for the gaseous emissions is recording accurate and reliable data less than 90% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the CEMS was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
2. If the continuous opacity monitoring system is recording accurate and reliable data less than 95% of the source-operating time within any quarter of the calendar year, the Department may initiate enforcement action and may include in that enforcement action any period of time that the continuous emission monitoring system was not recording accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction so the Department that the failure of the system to record accurate and reliable data was due to the performance of established quality assurance and quality control procedures or unavoidable malfunctions.
3. Parameter monitors must keep accurate and reliable data. If a parameter monitor allows the recording of accurate and reliable data less than 98% of the source operating time within any quarter of the calendar year (or less than 90% of the source operating time for bleach plant parameter monitors), the Department may initiate enforcement action and may include in that enforcement action any period of time that the parameter monitor was not providing accurate and reliable data during that quarter unless the licensee can demonstrate to the satisfaction of the Department that the failure of the system to provide accurate and reliable data was due to the performance of the established quality assurance and quality control procedures or unavoidable malfunctions.
4. Conduct Relative Accuracy Testing (RATA) and/or Performance Audits in accordance with Chapter 117 of the Department's regulations.
5. Develop and maintain an updated quality assurance plan for all CEMS and COMS in accordance with 40 CFR Part 60 Appendix F and Chapter 117 of the Department's regulations. [MEDEP Chapter 117]

6. NOx and opacity monitors for power boiler No. 8 are subject to NSPS requirements. Relevant sections of Subpart A, Db, Appendix B and F of NSPS are applicable for these monitors.

B. **Recordkeeping**

For all of the continuous emission monitoring (CEMS), continuous opacity monitor (COMS), equipment parameter monitoring and recording, required by this license, the licensee shall maintain records of the most current six year period and the records shall include:

1. Documentation which shows monitor operational status during all source operating time, including specifics for calibration and audits; and [MEDEP Chapter 117]
2. A complete data set of all monitored parameters as specified in this license. All parameter records shall be made available to the Bureau of Air Quality upon request.
   [MEDEP Chapter 117]

3. For all CEMS and COMS, the records shall include:
   a. Documentation that all CEMS and COMS are continuously accurate, reliable and operated in accordance with Chapter 117, 40 CFR Part 51, Appendix P, and 40 CFR Part 60, Appendices B and F; [MEDEP Chapter 117]
   b. Records of all measurements, performance evaluations, calibration checks, and maintenance or adjustments for each CEMS and COMS as required by 40 CFR Part 51 Appendix P; [MEDEP Chapter 117]

(36) Reporting Requirements

A. Quarterly Reporting

The licensee shall submit a Quarterly Report to the Bureau of Air Quality within 30 days after the end of each calendar quarter, detailing the following, for the control equipment, parameter monitors, Continuous Emission Monitoring Systems (CEMS) or Continuous Opacity Monitoring Systems (COMS) required by this license. [MEDEP Chapter 117]

1. All control equipment downtimes and malfunctions;
2. All CEMS or COMS downtimes and malfunctions;
3. All parameter monitor downtimes and malfunctions;
4. All excess events of emission and operational limitations set by this Order, Statute, state or federal regulations, as appropriate. The following information shall be reported for each excess event;
   a. Standard exceeded;

b. Date, time, and duration of excess event;
c. Maximum and average values of the excess event, reported in the units of the applicable standard, and copies of pertinent strip charts and printouts when requested;
d. A description of what caused the excess event;
e. The strategy employed to minimize the excess event; and
f. The strategy employed to prevent reoccurrence.

5. A report certifying there were no excess emissions, if that is the case.

B. Semiannual Reporting

The licensee shall submit semiannual reports every six months to the Bureau of Air Quality. The semiannual reports are due with every other quarterly report, and the initial semiannual report is due January 31, 2003 with the first quarterly report submitted (4th quarter, 2002) following the date of signature of this license.

a. Each semiannual report shall include a summary of the periodic monitoring required by this license.
b. All instances of deviations from license requirements and the corrective action taken must be clearly identified and provided to the Department in summary form for each six-month interval.
[MEDEP Chapter 140]

C. Annual Compliance Certification

The licensee shall submit an annual compliance certification to the Department in accordance with Condition (21) of this license. The initial annual compliance certification is due January 31, 2003 with the submittal of the first semiannual report after the signature date of this license. [MEDEP Chapter 140]

D. Annual Emission Statement

In accordance with MEDEP Chapter 137, LPP shall report annually to the Department the information necessary to accurately update the State's emission inventory by means of:

1) A computer program and accompanying instructions supplied by the Department;

or

2) A written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions should be directed to:

Attn: Criteria Emission Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

Phone: (207) 287-2437

The emission statement must be submitted by September 1.

E. Biennial Emission Statement

In accordance with MEDEP Chapter 137, the licensee shall report, no later than September 1, every two years (1996,1998,etc.) or in a timeframe designated to the Department, the information necessary to accurately update the State's toxic air pollutants emission inventory by means of a written emission statement containing the information required in MEDEP Chapter 137.

Reports and questions on the Air Toxics emissions inventory portion should be directed to:

Attn: Toxics Inventory Coordinator
Maine DEP
Bureau of Air Quality
17 State House Station
Augusta, ME 04333-0017

The emission statement must be submitted no later than September 1.

(37) **Stack Testing**

Unless otherwise specified in this license, compliance with emission limits shall be determined on the basis of stack tests conducted upon request of the Department and in accordance with methods in 40 CFR Part 60, or such other method as may be approved by the Department.

(38) LPP is subject to the State regulations listed below.

Origin and Authority	Requirement Summary	Enforceability
Chapter 102	Open Burning	-
Chapter 109	Emergency Episode Regulation	-
Chapter 110	Ambient Air Quality Standard	-
Chapter 116	Prohibited Dispersion Techniques	-
38 M.R.S.A. Section 3 §585-B, sub-§5	Reduce Mercury Use and Emissions	Enforceable by State-only

(39) LPP is subject to all applicable requirements of 40 CFR Part 82, Subpart F (Refrigerant Control).

(40) **Certification by a Responsible Official**
All reports (including quarterly reports, semiannual reports, and annual compliance certifications) required by this license to be submitted to the Bureau of Air Quality must be signed by a responsible official. [MEDEP Chapter 140]

(41) The term of this license shall be five (5) years from the signature date below.

DONE AND DATED IN AUGUSTA, MAINE THIS _____DAY OF _____2002.

DEPARTMENT OF ENVIRONMENTAL PROTECTION

BY: _____
MARTHA G. KIRKPATRICK, COMMISSIONER

PLEASE NOTE ATTACHED SHEET FOR GUIDANCE ON APPEAL PROCEDURES

Date of initial receipt of application: 10/28/97
Date of application acceptance: 10/28/97

Date filed with the Board of Environmental Protection _____

This Order prepared by Edwin Cousins, Bureau of Air Quality